STN Search - 10/517,692

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NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	AUG 06	CAS REGISTRY enhanced with new experimental property tags
NEWS 3	AUG 06	FSTA enhanced with new thesaurus edition
NEWS 4	AUG 13	CA/CAplus enhanced with additional kind codes for granted patents
NEWS 5	AUG 20	CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 6	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS 7	AUG 27	USPATOLD now available on STN
NEWS 8	AUG 28	CAS REGISTRY enhanced with additional experimental spectral property data
NEWS 9	SEP 07	STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS 10	SEP 13	FORIS renamed to SOFIS
NEWS 11	SEP 13	INPADOCDB enhanced with monthly SDI frequency
NEWS 12	SEP 17	CA/CAplus enhanced with printed CA page images from 1967-1998
NEWS 13	SEP 17	CAplus coverage extended to include traditional medicine patents
NEWS 14	SEP 24	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 15	OCT 02	CA/CAplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS 16	OCT 19	BEILSTEIN updated with new compounds
NEWS 17	NOV 15	Derwent Indian patent publication number format enhanced
NEWS 18	NOV 19	WPIX enhanced with XML display format
NEWS 19	NOV 30	ICSD reloaded with enhancements
NEWS 20	DEC 04	LINPADOCDB now available on STN
NEWS 21	DEC 14	BEILSTEIN pricing structure to change
NEWS 22	DEC 17	USPATOLD added to additional database clusters
NEWS 23	DEC 17	IMSDRUGCONF removed from database clusters and STN
NEWS 24	DEC 17	DGENE now includes more than 10 million sequences
NEWS 25	DEC 17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS 26	DEC 17	MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS 27	DEC 17	CA/CAplus enhanced with new custom IPC display formats
NEWS 28	DEC 17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS 29	JAN 02	STN pricing information for 2008 now available
NEWS 30	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS 31	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS 32	JAN 28	MARPAT searching enhanced
NEWS 33	JAN 28	USGENE now provides USPTO sequence data within 3 days

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                  of publication
 NEWS 34  JAN 28  TOXCENTER enhanced with reloaded MEDLINE segment
 NEWS 35  JAN 28  MEDLINE and LMEDLINE reloaded with enhancements

 NEWS EXPRESS  19 SEPTEMBER 2007:  CURRENT WINDOWS VERSION IS V8.2,
               CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN    Welcome Banner and News Items
 NEWS IPC8     For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
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* * * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 09:04:35 ON 31 JAN 2008

=> fil reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.21       0.21

FILE 'REGISTRY' ENTERED AT 09:04:41 ON 31 JAN 2008
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STRUCTURE FILE UPDATES:   30 JAN 2008  HIGHEST RN 1001156-45-1
DICTIONARY FILE UPDATES:  30 JAN 2008  HIGHEST RN 1001156-45-1

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TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

  Please note that search-term pricing does apply when
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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> e citric acid
E1           6     CITRIARBUSTI/BI
E2        5411     CITRIC/BI
E3           0 --> CITRIC ACID/BI
E4          18     CITRICA/BI
```

```
E5           1     CITRICAL/BI
E6           5     CITRICARPA/BI
E7           1     CITRICID/BI
E8        4309     CITRICIDA/BI
E9           1     CITRICIDAL/BI
E10          1     CITRICIN/BI
E11          7     CITRICOCCUS/BI
E12        113     CITRICOL/BI

=> e citric acid/cn
E1           1     CITRIC A-CYCLOHEXYLAMIDE/CN
E2           1     CITRIC B-CYCLOHEXYLAMIDE/CN
E3           1 --> CITRIC ACID/CN
E4           1     CITRIC ACID 2-(TERT-BUTYL) 1,3-BIS(SUCCINIMIDYL) ESTER/CN
E5           1     CITRIC ACID 2-(TERT-BUTYL) ESTER/CN
E6           1     CITRIC ACID 2-METHYLIMIDAZOLE SALT/CN
E7           1     CITRIC ACID 2-STEARYLOXYETHYL ESTER/CN
E8           1     CITRIC ACID CALCIUM MAGNESIUM SALT/CN
E9           1     CITRIC ACID CHLORALIDE/CN
E10          1     CITRIC ACID CHLORIDE/CN
E11          1     CITRIC ACID DIAMIDE/CN
E12          1     CITRIC ACID DIHYDRATE/CN

=> e malic acid/cn
E1           1     MALIBATOL A/CN
E2           1     MALIBATOL B/CN
E3           1 --> MALIC ACID/CN
E4           1     MALIC ACID 1-METHYL ESTER/CN
E5           1     MALIC ACID 2-METHYLIMIDAZOLE SALT/CN
E6           1     MALIC ACID ACETATE DICHLORIDE/CN
E7           1     MALIC ACID BARIUM SALT (1:1)/CN
E8           1     MALIC ACID CHLORALIDE/CN
E9           1     MALIC ACID DEHYDROGENASE/CN
E10          1     MALIC ACID DIALDEHYDE/CN
E11          1     MALIC ACID DIBENZYL ESTER/CN
E12          1     MALIC ACID DIETHANOLAMINE SALT/CN

=> s e3
L1           1 "MALIC ACID"/CN

=> e citric acid/cn
E1           1     CITRIC A-CYCLOHEXYLAMIDE/CN
E2           1     CITRIC B-CYCLOHEXYLAMIDE/CN
E3           1 --> CITRIC ACID/CN
E4           1     CITRIC ACID 2-(TERT-BUTYL) 1,3-BIS(SUCCINIMIDYL) ESTER/CN
E5           1     CITRIC ACID 2-(TERT-BUTYL) ESTER/CN
E6           1     CITRIC ACID 2-METHYLIMIDAZOLE SALT/CN
E7           1     CITRIC ACID 2-STEARYLOXYETHYL ESTER/CN
E8           1     CITRIC ACID CALCIUM MAGNESIUM SALT/CN
E9           1     CITRIC ACID CHLORALIDE/CN
E10          1     CITRIC ACID CHLORIDE/CN
E11          1     CITRIC ACID DIAMIDE/CN
E12          1     CITRIC ACID DIHYDRATE/CN

=> s e 3
        738466 E
      19827953 3
L2       15758 E 3
                 (E(W)3)
```

STN Search - 10/517,692

```
=> e oxalacetic acid/cn
E1            1     OXALACETATE-ASPARTATE AMINOTRANSFERASE/CN
E2            1     OXALACETIC B-DECARBOXYLASE/CN
E3            1 --> OXALACETIC ACID/CN
E4            1     OXALACETIC ACID 2-STILBAZOLE-4'-HYDRAZONE/CN
E5            1     OXALACETIC ACID DECARBOXYLASE/CN
E6            1     OXALACETIC ACID DIETHYL ESTER SODIUM SALT/CN
E7            1     OXALACETIC ACID O-METHYLOXIME/CN
E8            1     OXALACETIC ACID RADICAL CATION/CN
E9            1     OXALACETIC ACID, ((1-METHYL-3-OXO-1-BUTENYLAMINO)METHYLENE)-
                    /CN
E10           1     OXALACETIC ACID, ((1-METHYL-3-OXO-1-BUTENYLAMINO)METHYLENE)-
                    , DIETHYL ESTER/CN
E11           1     OXALACETIC ACID, ((11B,17-DIHYDROXY-3-OXOESTR-5(10)-EN-
                    17A-YL)METHYL)-, Γ-LACTONE, METHYL ESTER, CYCLIC
                     3-(ETHYLENE ACETAL)/CN
E12           1     OXALACETIC ACID, ((11B,17-DIHYDROXY-3-OXOESTR-5-EN-17.A
                    LPHA.-YL)METHYL)-, Γ-LACTONE, METHYL ESTER, CYCLIC 3-(
                    ETHYLENE ACETAL)/CN

=> s e3
L3            1 "OXALACETIC ACID"/CN

=> e citric acid/cn
E1            1     CITRIC A-CYCLOHEXYLAMIDE/CN
E2            1     CITRIC B-CYCLOHEXYLAMIDE/CN
E3            1 --> CITRIC ACID/CN
E4            1     CITRIC ACID 2-(TERT-BUTYL) 1,3-BIS(SUCCINIMIDYL) ESTER/CN
E5            1     CITRIC ACID 2-(TERT-BUTYL) ESTER/CN
E6            1     CITRIC ACID 2-METHYLIMIDAZOLE SALT/CN
E7            1     CITRIC ACID 2-STEARYLOXYETHYL ESTER/CN
E8            1     CITRIC ACID CALCIUM MAGNESIUM SALT/CN
E9            1     CITRIC ACID CHLORALIDE/CN
E10           1     CITRIC ACID CHLORIDE/CN
E11           1     CITRIC ACID DIAMIDE/CN
E12           1     CITRIC ACID DIHYDRATE/CN

=> s e3
L4            1 "CITRIC ACID"/CN

=> e aconitic acid/cn
E1            1     ACONITE, TINCTURE/CN
E2            1     ACONITI TINCTURE/CN
E3            1 --> ACONITIC ACID/CN
E4            1     ACONITIC ACID ANHYDRIDE-ETHYLENE-OCTYL ACRYLATE-PROPYLENE GR
                    AFT COPOLYMER/CN
E5            1     ACONITIC ACID IRON SALT/CN
E6            1     ACONITIC ACID MONOMETHYL ESTER/CN
E7            1     ACONITIC ACID TRIBENZYL ESTER/CN
E8            1     ACONITIC ACID, A-AMINO-, TRIETHYL ESTER/CN
E9            1     ACONITIC ACID, A-BROMO-, TRIETHYL ESTER/CN
E10           1     ACONITIC ACID, A-CYANO-Γ-FLUORO-, TRIETHYL ESTER
                    /CN
E11           1     ACONITIC ACID, A-ETHOXY-Γ-OXO-, TRIETHYL ESTER/C
                    N
E12           1     ACONITIC ACID, A-PROPOXY-, TRIETHYL ESTER/CN

=> s e3
L5            1 "ACONITIC ACID"/CN
```

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```
=> e malate
E1            1     MALATASE/BI
E2            1     MALATATE/BI
E3         5352 --> MALATE/BI
E4            1     MALATE63/BI
E5            1     MALATE:NA+/BI
E6            4     MALATE:NAD+/BI
E7           87     MALATE:QUINONE/BI
E8            1     MALATEDEHYDROGEN/BI
E9            1     MALATEDEHYDROGENASE/BI
E10           4     MALATES/BI
E11           1     MALATESTAI/BI
E12           2     MALATESYN/BI

=> s e3
L6         5352 MALATE/BI

=> d his

     (FILE 'HOME' ENTERED AT 09:04:35 ON 31 JAN 2008)

     FILE 'REGISTRY' ENTERED AT 09:04:41 ON 31 JAN 2008
                E CITRIC ACID
                E CITRIC ACID/CN
                E MALIC ACID/CN
L1              1 S E3
                E CITRIC ACID/CN
L2         15758 S E 3
                E OXALACETIC ACID/CN
L3              1 S E3
                E CITRIC ACID/CN
L4              1 S E3
                E ACONITIC ACID/CN
L5              1 S E3
                E MALATE
L6           5352 S E3

=> fil caplus
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                  39.73      39.94

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FILE COVERS 1907 - 31 Jan 2008  VOL 148 ISS 5
FILE LAST UPDATED: 30 Jan 2008  (20080130/ED)
```

STN Search - 10/517,692

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http://www.cas.org/infopolicy.html

```
=> s l1 or l2 or l3 or l4 or l5 or l6
         22764 L1
        920942 L2
          4146 L3
         68175 L4
          1003 L5
         22725 L6
L7     1016908 L1 OR L2 OR L3 OR L4 OR L5 OR L6

=> s l1
L8       22764 L1

=> s l2
L9      920942 L2

=> s l3
L10       4146 L3

=> s l4
L11      68175 L4

=> s l5
L12       1003 L5

=> s l6
L13      22725 L6

=> fil reg
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                   0.48      40.42

FILE 'REGISTRY' ENTERED AT 09:10:08 ON 31 JAN 2008
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DICTIONARY FILE UPDATES:  30 JAN 2008  HIGHEST RN 1001156-45-1

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TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

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  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:
```

http://www.cas.org/support/stngen/stndoc/properties.html

```
=> e hydroxysuccinimide
E1            2     HYDROXYSUCCINIMI/BI
E2           49     HYDROXYSUCCINIMID/BI
E3          222 --> HYDROXYSUCCINIMIDE/BI
E4            1     HYDROXYSUCCINIMIDESTER/BI
E5           17     HYDROXYSUCCINIMIDO/BI
E6            1     HYDROXYSUCCINIMIDOTHALLIUM/BI
E7            4     HYDROXYSUCCINIMIDOYL/BI
E8           49     HYDROXYSUCCINIMIDYL/BI
E9            2     HYDROXYSUCCINIMIDYLPROPION/BI
E10           2     HYDROXYSUCCINIMIDYLPROPIONATE/BI
E11           1     HYDROXYSUCCINIMIDYLUNDECAN/BI
E12           1     HYDROXYSUCCINIMIDYLUNDECANO/BI

=> e n-hydroxysuccinimide/cn
E1            1     N-HYDROXYSUCCINAMIC ACID/CN
E2            1     N-HYDROXYSUCCINAMIDE/CN
E3            1 --> N-HYDROXYSUCCINIMIDE/CN
E4            1     N-HYDROXYSUCCINIMIDE 4-AZIDO-2-HYDROXYBENZOATE/CN
E5            1     N-HYDROXYSUCCINIMIDE 4-AZIDOBENZOATE/CN
E6            1     N-HYDROXYSUCCINIMIDE 4-AZIDOBENZOIC ESTER/CN
E7            1     N-HYDROXYSUCCINIMIDE ACETATE/CN
E8            1     N-HYDROXYSUCCINIMIDE BROMOACETATE/CN
E9            1     N-HYDROXYSUCCINIMIDE CHLOROFORMATE/CN
E10           1     N-HYDROXYSUCCINIMIDE DOCOSANOATE/CN
E11           1     N-HYDROXYSUCCINIMIDE ESTER OF 2-NITRO-5-AZIDOBENZOYL-GLYCINE
                    /CN
E12           1     N-HYDROXYSUCCINIMIDE ESTER OF N-(4-CARBOXYPHENYLMETHYL)MALEI
                    MIDE/CN

=> s e3
L14           1 N-HYDROXYSUCCINIMIDE/CN

=> e n-hydroxysulfosuccinimide/cn
E1            1     N-HYDROXYSUCCINIMIDYL PYRENEBUTANOATE/CN
E2            1     N-HYDROXYSULFONAPHTHALIMIDE/CN
E3            1 --> N-HYDROXYSULFOSUCCINIMIDE/CN
E4            1     N-HYDROXYSULFOSUCCINIMIDE SODIUM SALT/CN
E5            1     N-HYDROXYSULFOSUCCINIMIDYL-DOTA/CN
E6            1     N-HYDROXYTETRABROMOPHTHALIMIDE/CN
E7            1     N-HYDROXYTETRACHLOROPHTHALIMIDE/CN
E8            1     N-HYDROXYTETRADECANAMIDE/CN
E9            1     N-HYDROXYTETRAPROPENYLSUCCINIMIDE/CN
E10           1     N-HYDROXYTHIAZOLE-2(3H)-THIONE/CN
E11           1     N-HYDROXYTHIOBENZANILIDE/CN
E12           1     N-HYDROXYTHIOCARBANILIDE/CN

=> s e3
L15           1 N-HYDROXYSULFOSUCCINIMIDE/CN

=> fil caplus
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                10.76      51.18

FILE 'CAPLUS' ENTERED AT 09:10:58 ON 31 JAN 2008
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STN Search - 10/517,692

FILE COVERS 1907 - 31 Jan 2008 VOL 148 ISS 5
FILE LAST UPDATED: 30 Jan 2008 (20080130/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

```
=> s l14
L16       5280 L14

=> s l15
L17        312 L15

=> s l16 or l17
L18       5501 L16 OR L17

=> s l15 and (py<=2003)
           312 L15
      23975525 PY<=2003
L19        162 L15 AND (PY<=2003)

=> d his

     (FILE 'HOME' ENTERED AT 09:04:35 ON 31 JAN 2008)

     FILE 'REGISTRY' ENTERED AT 09:04:41 ON 31 JAN 2008
                E CITRIC ACID
                E CITRIC ACID/CN
                E MALIC ACID/CN
L1              1 S E3
                E CITRIC ACID/CN
L2         15758 S E 3
                E OXALACETIC ACID/CN
L3              1 S E3
                E CITRIC ACID/CN
L4              1 S E3
                E ACONITIC ACID/CN
L5              1 S E3
                E MALATE
L6          5352 S E3

     FILE 'CAPLUS' ENTERED AT 09:09:21 ON 31 JAN 2008
L7       1016908 S L1 OR L2 OR L3 OR L4 OR L5 OR L6
L8         22764 S L1
L9        920942 S L2
```

STN Search - 10/517,692

```
L10        4146 S L3
L11       68175 S L4
L12        1003 S L5
L13       22725 S L6

     FILE 'REGISTRY' ENTERED AT 09:10:08 ON 31 JAN 2008
                E HYDROXYSUCCINIMIDE
                E N-HYDROXYSUCCINIMIDE/CN
L14           1 S E3
                E N-HYDROXYSULFOSUCCINIMIDE/CN
L15           1 S E3

     FILE 'CAPLUS' ENTERED AT 09:10:58 ON 31 JAN 2008
L16        5280 S L14
L17         312 S L15
L18        5501 S L16 OR L17
L19         162 S L15 AND (PY<=2003)

=> s l7 and (py<=2003)
      23975525 PY<=2003
L20     784186 L7 AND (PY<=2003)

=> s l8 and (py<=2003)
      23975525 PY<=2003
L21      18251 L8 AND (PY<=2003)

=> s l9 and (py<=2003)
      23975525 PY<=2003
L22     707903 L9 AND (PY<=2003)

=> s l10 and (py<=2003)
      23975525 PY<=2003
L23       3763 L10 AND (PY<=2003)

=> s l11 and (py<=2003)
      23975525 PY<=2003
L24      50287 L11 AND (PY<=2003)

=> s l12 and (py<=2003)
      23975525 PY<=2003
L25        890 L12 AND (PY<=2003)

=> s l13 and (py<=2003)
      23975525 PY<=2003
L26      19656 L13 AND (PY<=2003)

=> d his

     (FILE 'HOME' ENTERED AT 09:04:35 ON 31 JAN 2008)

     FILE 'REGISTRY' ENTERED AT 09:04:41 ON 31 JAN 2008
                E CITRIC ACID
                E CITRIC ACID/CN
                E MALIC ACID/CN
L1            1 S E3
                E CITRIC ACID/CN
L2        15758 S E 3
                E OXALACETIC ACID/CN
L3            1 S E3
                E CITRIC ACID/CN
```

STN Search - 10/517,692

```
L4            1 S E3
                E ACONITIC ACID/CN
L5            1 S E3
                E MALATE
L6         5352 S E3

     FILE 'CAPLUS' ENTERED AT 09:09:21 ON 31 JAN 2008
L7      1016908 S L1 OR L2 OR L3 OR L4 OR L5 OR L6
L8        22764 S L1
L9       920942 S L2
L10        4146 S L3
L11       68175 S L4
L12        1003 S L5
L13       22725 S L6

     FILE 'REGISTRY' ENTERED AT 09:10:08 ON 31 JAN 2008
                E HYDROXYSUCCINIMIDE
                E N-HYDROXYSUCCINIMIDE/CN
L14           1 S E3
                E N-HYDROXYSULFOSUCCINIMIDE/CN
L15           1 S E3

     FILE 'CAPLUS' ENTERED AT 09:10:58 ON 31 JAN 2008
L16        5280 S L14
L17         312 S L15
L18        5501 S L16 OR L17
L19         162 S L15 AND (PY<=2003)
L20      784186 S L7 AND (PY<=2003)
L21       18251 S L8 AND (PY<=2003)
L22      707903 S L9 AND (PY<=2003)
L23        3763 S L10 AND (PY<=2003)
L24       50287 S L11 AND (PY<=2003)
L25         890 S L12 AND (PY<=2003)
L26       19656 S L13 AND (PY<=2003)

=> s l19 and l25
L27           0 L19 AND L25

=> s l19 and l20
L28           8 L19 AND L20

=> d ibib abs 1-8

L28  ANSWER 1 OF 8  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:        2003:991783  CAPLUS
DOCUMENT NUMBER:         140:25201
TITLE:                   Biomolecule open channel solid phase extraction
                         systems and methods
INVENTOR(S):             Gjerde, Douglas T.; Hanna, Christopher P.
PATENT ASSIGNEE(S):      Phynexus, Inc., USA
SOURCE:                  PCT Int. Appl., 122 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  8
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ----------------    ----   --------    --------------------   --------
     WO 2003104814        A2    20031218    WO 2003-US14503        20030508 <--
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WO 2003104814 A3 20041111
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 2003233498 A1 20031222 AU 2003-233498 20030508 <--
EP 1518115 A2 20050330 EP 2003-728775 20030508
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
JP 2005529335 T 20050929 JP 2004-511834 20030508
PRIORITY APPLN. INFO.: US 2002-388120P P 20020610
US 2002-419136P P 20021016
US 2002-434061P P 20021217
US 2003-447605P P 20030214
WO 2003-US14503 W 20030508

AB An open capillary channel device for open tubular solid phase extraction of mols. capable of providing a tube enrichment factor of at least 1. The device comprises a channel having one end connected to a pump for pumping liquid and gas, and the other end can be connected to an interface for a protein chip sample applicator or a mass spectrometer. The inner surface of the channel, an extraction surface, can be bonded to an affinity binding agent such as a chelated metal, a protein, a sugar or nucleic acid. The method uses this device to bind analyte mols. from a sample solution to the affinity extraction surface and desorb analyte from the extraction surface with a
desorbent liquid, with an extraction factor greater than 1.

L28 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:118290 CAPLUS
DOCUMENT NUMBER: 138:177983
TITLE: Upconversion luminescence materials and methods of making and using same
INVENTOR(S): Chen, Wei
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 40 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003030067	A1	20030213	US 2002-166313	20020606 <--
US 7008559	B2	20060307		
US 2003064532	A1	20030403	US 2002-223764	20020819 <--
US 7067072	B2	20060627		
US 2005169348	A1	20050804	US 2003-460531	20030612
US 2006274813	A9	20061207		
US 2005253095	A1	20051117	US 2005-67373	20050225
US 7126136	B2	20061024		
US 2006140240	A1	20060629	US 2005-202005	20050811

PRIORITY APPLN. INFO.: US 2001-296333P P 20010606
US 2002-356598P P 20020211

US 2001-313236P	P	20010817
US 2002-356542P	P	20020211
US 2002-166313	A2	20020606
US 2002-388211P	P	20020612
US 2002-223764	A1	20020819

AB An upconversion luminescence material of the general formula X:Y (X:host; Y:dopant) wherein the at least one dopant is capable of increasing the luminescence intensity or quantum efficiency of the host is described wherein X may be a semiconductor nanoparticle selected from ZnSx, ZnSex, ZnTex, CdSx, CdSex, CdTex, PbSx, PbSex, PbTex, MgSx, CaSx, BaSx, SrSx and Y may be selected from Eu3+, Tb3+, Ce3+, Er3+, Mn2+ and Cu+. An upconversion luminescence production assembly is also described comprising an electromagnetic source emitting an excitation having an excitation wavelength; a substrate positioned within the excitation emitted by the electromagnetic source; and a upconversion luminescent (UCL) material operably associated with at least a portion of the substrate such that the excitation emitted by the electromagnetic source is received by at least a portion of the UCL material, the UCL material producing an emission through upconversion luminescence having an emission wavelength shorter than the excitation wavelength of the excitation received by the UCL material. Use of the phosphor in biol. and biomedical devices is indicated.

REFERENCE COUNT: 250 THERE ARE 250 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:43871 CAPLUS
DOCUMENT NUMBER: 138:364590
TITLE: Kinetic locking-on and auxiliary tactics for bioaffinity purification of NADP+-dependent dehydrogenases using N6-linked immobilized NADP+ derivatives: studies with mammalian and microbial glutamate dehydrogenases
AUTHOR(S): McMahon, Mary; Tynan, Julie; Mulcahy, Patricia
CORPORATE SOURCE: Department of Applied Biology and Chemistry, Institute of Technology, Carlow, Ire.
SOURCE: Biotechnology and Bioengineering (2003), 81(3), 356-369
CODEN: BIBIAU; ISSN: 0006-3592
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB This study is concerned with the development and application of kinetic locking-on and auxiliary tactics for bioaffinity purification of NADP+-dependent dehydrogenases, specifically (1) the synthesis and characterization of highly substituted N6-linked immobilized NADP+ derivs. using a rapid solid-phase modular approach; (2) the evaluation of the N6-linked immobilized NADP+ derivs. for use with the kinetic locking-on strategy for bioaffinity purification of NADP+-dependent dehydrogenases: Model bioaffinity chromatog. studies with glutamate dehydrogenase from bovine liver (GDH with dual cofactor specificity, EC 1.4.1.3) and glutamate dehydrogenase from Candida utilis (GDH which is NADP+-specific, EC 1.4.1.4); (3) the selection of an effective "stripping ligand" for NADP+-dehydrogenase bioaffinity purifications using N6-linked immobilized NADP+ derivs. in the locking-on mode; and (4) the application of the developed bioaffinity chromatog. system to the purification of C. utilis GDH from a crude cellular extract Results confirm that the newly developed N6-linked immobilized NADP+ derivs. are suitable for the one-step bioaffinity purification of NADP+-dependent GDH provided that they are used in

the locking-on mode, steps are taken to inhibit alkaline phosphatase activity in crude cellular exts., and 2',5'-ADP is used as the stripping ligand during chromatog. The general principles described here are supported by a specific sample enzyme purification; the purification of C. utilis GDH to electrophoretic homogeneity in a single bioaffinity chromatog. step (specific activity, 9.12 μmol/min/mg; purification factor, 83.7; yield 88%). The potential for development of analogous bioaffinity systems for other NADP+-dependent dehydrogenases is also discussed.
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:825899 CAPLUS
DOCUMENT NUMBER: 138:113964
TITLE: Preparation, characterization and application of alkanethiol self-assembled monolayers modified with tetrathiafulvalene and glucose oxidase at a gold disk electrode
AUTHOR(S): Campuzano, Susana; Galvez, Rocio; Pedrero, Maria; De Villena, F. Javier Manuel; Pingarron, Jose M.
CORPORATE SOURCE: Dpto. Quimica Analitica. Facultad de CC. Quimicas. Universidad Complutense de Madrid, Madrid, E-28040, Spain
SOURCE: Proceedings - Electrochemical Society (2001), 2001-18(Chemical and Biological Sensors and Analytical Methods II), 602-608
CODEN: PESODO; ISSN: 0161-6374
PUBLISHER: Electrochemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In this work, the results obtained with a gold disk electrode modified with alkanethiol self-assembled monolayers (SAMs), and glucose oxidase (GOD), and the redox mediator tetrathiafulvalene (TTF) immobilized atop are presented. Thus, a gold electrode modified with a mercaptopropionic acid SAM, where GOD and TTF were immobilized by crosslinking with glutaraldehyde, allowed linear calibration curves for glucose, obtained by amperometry in stirred solns. at an applied potential of +0.20 V, in the 5.0 10-6 - 1.0 10-2 mol L-1 range. A detection limit of 1.3 10-6 mol L-1, and a RSD of 5.2% (n=10), at a concentration level of 1.0 10-4 mol L-1, were found. No leaching of the enzyme and mediator is observed during the whole working day. The modified electrode is stable in dry conditions for 24 h and for at least 100 h if kept in a 4°C H2PO4-/HPO42- buffer solution (pH 7.4).
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:763341 CAPLUS
DOCUMENT NUMBER: 135:312579
TITLE: Magnetically-responsive microspheres
INVENTOR(S): Chandler, Donald J.; Herren, Michael A.
PATENT ASSIGNEE(S): Luminex Corporation, USA
SOURCE: PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2001078087	A2	20011018	WO 2001-US11122	20010406 <--
WO 2001078087	A3	20020704		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2001046602	A1	20011129	US 2001-826960	20010406 <--
US 6773812	B2	20040810		
PRIORITY APPLN. INFO.:			US 2000-194889P	P 20000406

AB Microspheres are constructed using magnetic particles. Hybrid microspheres are constructed using fluorescent or luminescent microspheres and magnetic nanoparticles. Reactive moieties on the surface of the resultant particles can be used for attachment of biol. active mols., thus allowing selective sepns. and anal. assays to be performed. Distinguishable subsets of microspheres can be constructed based on fluorescent intensities, and sepns. can be affected based on variable degree of magnetic content.

L28 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:163317 CAPLUS
DOCUMENT NUMBER: 134:339824
TITLE: A novel chitosan derivative to immobilize α-L-rhamnopyranosidase from Aspergillus niger for application in beverage technologies
AUTHOR(S): Spagna, G.; Barbagallo, R. N.; Casarini, D.; Pifferi, P. G.
CORPORATE SOURCE: Food Biotechnology Group from the Department of Horticulture, Floriculture, Arboriculture and Agroindustrial Technology (DOFATA), University of Catania, Catania, 95123, Italy
SOURCE: Enzyme and Microbial Technology (2001), 28(4-5), 427-438
CODEN: EMTED2; ISSN: 0141-0229
PUBLISHER: Elsevier Science Ireland Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB α-L-rhamnopyranosidase (Rha, EC 3.2.1.40) is an enzyme of considerable importance to food technol. in increasing the aroma of wines, musts, fruit juices and other beverages. The aim of this research is the immobilization of the Rha contained in a com. preparation already used in the winemaking industry. The immobilization supports tested were chitin, chitosan and derivatized chitosan, diethylaminoethyl chitosan (DE-chitosan) never previously used for this type of application. Particularly, on DE-chitosan, the Rha was adsorbed and cross-linked with various bifunctional agents (glutaraldehyde, diepoxyoctane, suberimidate and carbodiimide), whose best results (immobilization yields and activity) were obtained with carbodiimide (EDC) that allowed a reduction in the involvement of the enzyme amine groups that are probably important in catalytic mechanism. In addition, the use of rhamnose and a succinimide (NHS) during crosslinking enhanced the action of the EDC and so increased the immobilization yield and activity. The immobilized Rha retained the kinetic parameters (Km and Vmax) of the free enzyme and increased stability. Moreover, this biocatalyst allowed an increase in the aroma in a model wine solution containing glycosidic precursors with a marked reduction in

specificity toward tertiary monoterpenols as compared to the free enzyme.
REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:978863 CAPLUS
DOCUMENT NUMBER: 124:3993
TITLE: Solid phase immunoassay to detect inhibitors of proteolytic enzymes using a tubulin substrate
INVENTOR(S): Islam, Khalid; Carrano, Lucia; Denaro, Maurizio
PATENT ASSIGNEE(S): Gruppo Lepetit S.p.A., Italy
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
WO 9526505	A1	19951005	WO 1995-EP867	19950309	<--
W: JP, US					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
EP 753152	A1	19970115	EP 1995-913069	19950309	<--
EP 753152	B1	19980415			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE					
JP 09510786	T	19971028	JP 1995-524925	19950309	<--
JP 3517712	B2	20040412			
AT 165168	T	19980515	AT 1995-913069	19950309	<--
ES 2114743	T3	19980601	ES 1995-913069	19950309	<--
US 6159746	A	20001212	US 1996-714159	19960923	<--
PRIORITY APPLN. INFO.:			EP 1994-104922 A	19940329	
			WO 1995-EP867 W	19950309	

AB A solid phase immunoassay for detecting specific inhibitors of proteolytic enzymes in biol. fluids or in any kind of solution containing them, as well as for detecting proteolytic activities in any solution containing them, is presented. The assay allows determination of inhibitors of the more common classes of proteases at the same time, using the same peptide substrate and the same detection antibody. Tubulin protein or a tubulin-like peptide covalently linked to a suitable support is contacted with a solution containing the proteolytic activity together with a protease inhibitor. Inhibitor activity against the selected proteases is determined by contacting the support with a solution containing a labeled monoclonal antibody which specifically recognizes the free end of the tubulin protein linked to the support. The method is illustrated using tubulin or a 21-residues containing the C-terminus of α-tubulin covalently linked to plastic microtiter wells via bis(sulfosuccinimidyl)suberate. The antibody preparation consists of rat antibody YL 1/2 specific for the C-terminus of undegraded, linked tubulin (or the synthetic peptide) and a peroxidase-labeled anti-YL 1/2 antibody. The method is accurate, precise, rapid, and easy to practice, and the intra- and inter- assay precision are well within the range of values currently accepted for anal. purposes.

L28 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:467303 CAPLUS
DOCUMENT NUMBER: 119:67303
TITLE: Reactive chitosan-coated articles and test kit for immunoassay
INVENTOR(S): Saunders, Mary S.; Pegg, Randall K.
PATENT ASSIGNEE(S): USA

STN Search - 10/517,692

SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5208166	A	19930504	US 1991-662420	19910228 <--

PRIORITY APPLN. INFO.: US 1991-662420 19910228

AB A solid surface is coated with chitosan and a polyvalent organic acid, and the chitosan is oxidized to provide a substratum for immobilization of immunochem. reagents for use in immunoassays. Thus, a stock solution of chitosan (0.02 g/mL in 0.1M citric acid, pH 2.0) was diluted 1:10, used to coat a polystyrene microtiter strip, and the chitosan was oxidized with NaNO2 (0.002 g/200 mL) for immobilization of rabbit IgG.

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E CITRIC ACID/CN
L2 15758 S E 3
E OXALACETIC ACID/CN
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E MALATE
L6 5352 S E3

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L15 1 S E3

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L17 312 S L15
L18 5501 S L16 OR L17
L19 162 S L15 AND (PY<=2003)

STN Search - 10/517,692

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L21       18251 S L8 AND (PY<=2003)
L22      707903 S L9 AND (PY<=2003)
L23        3763 S L10 AND (PY<=2003)
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L25         890 S L12 AND (PY<=2003)
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L27           0 S L19 AND L25
L28           8 S L19 AND L20

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Numeric data cannot be field qualified.

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FIELD CODES CANNOT BE CHANGED HERE
You may have tried to apply a field code to a term that already has a
field code.  You can only add a field code to a term that has no field
code appended to it.

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FULL ESTIMATED COST                                      46.00      97.18

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CA SUBSCRIBER PRICE                                      -6.40      -6.40

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DICTIONARY FILE UPDATES:  30 JAN 2008  HIGHEST RN 1001156-45-1

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STN Search - 10/517,692

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CA SUBSCRIBER PRICE                                   0.00      -6.40

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FILE LAST UPDATED: 30 Jan 2008  (20080130/ED)

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L10         4146 S L3
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L20       784186 S L7 AND (PY<=2003)
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STN Search - 10/517,692

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                E N-HYDROXYSUCCINIMIDE/CN
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L15             1 S E3
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STN Search - 10/517,692

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L19          162 S L15 AND (PY<=2003)
L20       784186 S L7 AND (PY<=2003)
L21        18251 S L8 AND (PY<=2003)
L22       707903 S L9 AND (PY<=2003)
L23         3763 S L10 AND (PY<=2003)
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L25          890 S L12 AND (PY<=2003)
L26        19656 S L13 AND (PY<=2003)
L27            0 S L19 AND L25
L28            8 S L19 AND L20

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L34           42 S L5/RACT
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      23975525 PY<=2003
L41       3152 L39 AND (PY<=2003)

=> s l40 and l41
L42         48 L40 AND L41

=> d ibib abs 1-48

L42  ANSWER 1 OF 48  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:        2006:889280  CAPLUS
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DOCUMENT NUMBER: 145:299763
TITLE: Devices with multiple surface functionality coated with phosphates or phosphonates
INVENTOR(S): Schwartz, Jeffrey; Gawalt, Ellen S.; Alvatroni, Michael J.
PATENT ASSIGNEE(S): Princeton University, USA
SOURCE: U.S. Pat. Appl. Publ., 57pp., Cont.-in-part of U.S. Ser. No. 876,294.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 2006194008	A1	20060831	US 2006-330814	20060112	
US 6645644	B1	20031111	US 2000-668080	20000922	<--
US 2004001959	A1	20040101	US 2002-179743	20020624	
US 2004023048	A1	20040205	US 2003-405557	20030401	
US 2004265571	A1	20041230	US 2003-701591	20031104	
US 2005031910	A1	20050210	US 2004-876294	20040623	

PRIORITY APPLN. INFO.:

US 1999-155398P	P	19990922
US 2000-668080	A2	20000922
US 2001-300144P	P	20010622
US 2002-369236P	P	20020401
US 2002-369237P	P	20020401
US 2002-389574P	P	20020618
US 2002-179743	A2	20020624
US 2003-446680P	P	20030211
US 2003-446681P	P	20030211
US 2003-405557	A2	20030401
US 2003-467348P	P	20030502
US 2003-480670P	P	20030623
US 2003-490613P	P	20030728
US 2003-701591	A2	20031104
US 2004-876294	A2	20040623
US 2005-643647P	P	20050113
US 2005-643648P	P	20050113
US 2005-684159P	P	20050525
US 2005-699498P	P	20050715
US 2005-707525P	P	20050812
US 1996-28949P	P	19961017
US 1997-35040P	P	19970113
US 1997-794833	A2	19970204

AB Phosphorus-based coatings having a plurality of phosphate moieties, a plurality of phosphonate moieties, or both, covalently bonded to an oxide surface of an implantable substrate are provided. The coatings exhibit one or more of the following characteristics: (a) the surface phosphorus-containing group d. of the coated regions of the substrate is at least about 0.1 nmol/cm2; (b) the phosphorus-based coating has a thickness of less than about 10 nm; or (c) the surface phosphorus-containing group d. of the coated regions of the substrate is equal to or greater than the surface hydroxyl group d. of the oxide surface of the substrate. Implantable devices embodying the coated substrates are also disclosed. Thus, regions of a titanium hip implant were coated with (1) 11-hydroxyundecylphosphonic acid to which an osteoconductive mol. such as a peptide containing the RGD moiety is attached, to induce osteoconduction, (2) underivatized 11-hydroxyundecylphosphonic acid, to prevent corrosion and leaching of metals, and (3) octadecylphosphonic acid, to lubricate the

interface between the ball and interior surface of the acetabular cup and to minimize wear debris generated from abrasion at the interface between the surfaces.

L42 ANSWER 2 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:501609 CAPLUS
DOCUMENT NUMBER: 142:172650
TITLE: Labelling technique of biomolecules for target radiotherapy
AUTHOR(S): Bai, Hongsheng; Jin, Xiaohai; Zhen, Cheng; Jia, Bing Fan Hongqiang; Lu, Weiwei
CORPORATE SOURCE: Department of Isotope, China Institute of Atomic Energy, Beijing, Peop. Rep. China
SOURCE: International Atomic Energy Agency, [Technical Document], IAEA-TECDOC (2003), IAEA-TECDOC-1359, Labeling Techniques of Biomolecules for Targeted Radiotherapy, 65-71
CODEN: IAEIE2; ISSN: 1011-4289
DOCUMENT TYPE: Report
LANGUAGE: English
AB Labeling techniques were developed for the preparation of biomols. (DOTA-IgG, DOTA-lanreotide, anti-hepatoma antibody fragment, lanreotide) with radionuclides such as 90Y, 153Sm and 188Re. The labeling yield and radiochem. purity of these labeling biomols. were determined by PC, ITLC and Sep-Pak C18 cartridge. The stability in vitro and bio-behavior in normal rats were also evaluated. The exptl. results showed that labeling efficiency of biomols. (DOTA-IgG and DOTA-lanreotide) with 90Y and 153Sm is more than 95% and had good stability in vitro, but the labeling efficiency of biomols. (anti-hepatoma antibody fragment and lanreotide) with 188Re via directly labeling technique is at range of 88% .apprx. 95% and stability in vitro was less.

L42 ANSWER 3 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:918360 CAPLUS
DOCUMENT NUMBER: 140:281056
TITLE: Vasorelaxant activity of N-caffeoylamino acids
AUTHOR(S): Iizuka, Toru; Funayama, Hiroko; Kusano, Genjiro; Nagai, Masahiro
CORPORATE SOURCE: Fac. of Pharmaceutical Sciences, Hoshi Univ., Tokyo, 142-8501, Japan
SOURCE: Yakugaku Zasshi (2003), 123(11), 963-971
CODEN: YKKZAJ; ISSN: 0031-6903
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Twelve N-caffeoylamino acids and N-cinnamoylamino acids were synthesized and their vasorelaxation activity against norepinephrine (NE)-induced contraction of rat aorta was examined The following structure-activity relationships were found. (1) On the benzene ring, the caffeoyl structure is effective for vasorelaxation, while the cinnamoyl structure reduced vasorelaxation activity. (2) Four to six carbons are more effective as the carbon chain connecting the acylamino and carboxyl terminal groups. N-Caffeoyl-β-alanine and N-caffeoyltranexamic acid were used to investigate the action mechanism of vasorelaxing activities. It is believed that these compds. antagonize NE-induced vasocontraction by inhibiting receptor-operated calcium channels.

L42 ANSWER 4 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:891635 CAPLUS
DOCUMENT NUMBER: 140:402703

TITLE: Immobilized culture of nonadherent cells on an oleyl poly(ethylene glycol) ether-modified surface
AUTHOR(S): Kato, Koichi; Umezawa, Kohei; Funeriu, Daniel P.; Miyake, Masato; Miyake, Jun; Nagamune, Teruyuki
CORPORATE SOURCE: National Institute of Advanced Industrial Science and Technology, Hyogo, Japan
SOURCE: BioTechniques (2003), 35(5), 1014-1016,1018,1020-1021
CODEN: BTNQDO; ISSN: 0736-6205
PUBLISHER: Eaton Publishing Co.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Microarrays of living cells are an emerging tool in systems such as reverse transfection. These studies are limited to adherent cells partly because of the difficulty of cell immobilization. Using a newly developed reagent, the biocompatible anchor for membrane (BAM), the rapid and strong attachment of living nonadherent cells and adherent cells on BAM-modified surfaces is shown in the study. Normal cellular growth was observed for over 7 days on BAM-modified surfaces. It is expected that this methodol. to greatly expand the scope of current cell microarray technol.
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 5 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:707991 CAPLUS
DOCUMENT NUMBER: 140:4873
TITLE: Self-condensation of activated malonic acid half esters: a model for the decarboxylative Claisen condensation in polyketide biosynthesis
AUTHOR(S): Ryu, Youngha; Scott, A. Ian
CORPORATE SOURCE: Department of Chemistry, Center for Biological NMR, Texas A&M University,
College Station, TX, 77843, USA
SOURCE: Tetrahedron Letters (2003), 44(40), 7499-7502
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:4873
AB The reaction of a malonic acid half oxyesters RO2CCH2CO2H [R = CH2Ph, Ph, (E)-CH2CH:CMe(CH2)2CH:CMe2, etc.] with a N-hydroxysuccinimidyl ester-forming reagent (O-(N-succinimidyl)-N,N,N',N'-tetramethyluronium tetrafluoroborate) resulted in self-condensation to provide the corresponding 1,3-acetonedicarboxylic acid diesters RO2CCH2COCH2CO2R. This new method does not require a divalent metal chelator or a coordinating solvent for successful condensation.
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 6 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:971937 CAPLUS
DOCUMENT NUMBER: 138:385679
TITLE: Ammonium salts from polymer-bound N-hydroxysuccinimide as solid-supported reagents for EDC-mediated amidations
AUTHOR(S): Chinchilla, Rafael; Dodsworth, David J.; Najera, Carmen; Soriano, Jose M.
CORPORATE SOURCE: Facultad de Ciencias, Departamento de Quimica Organica, Universidad de Alicante, Alicante, 03080, Spain
SOURCE: Tetrahedron Letters (2002), Volume Date 2003, 44(3),

463-466
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:385679
AB New ammonium and alkylammonium salts derived from a polymeric N-hydroxysuccinimide (P-HOSu) have been prepared and used for the amidation of carboxylic acids and amino acids mediated by 1-ethyl-3-[3-(dimethylamino)propyl]carbodiimide hydrochloride (EDC). These polymer-supported ammonium salts afforded the corresponding amides in good yield, without detectable α-racemization and with easy recovery of the P-HOSu after the amidation reaction, being especially suitable for the amidation of Fmoc-protected amino acids.
REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 7 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:908277 CAPLUS
DOCUMENT NUMBER: 138:254580
TITLE: IBX-mediated oxidation of primary alcohols and aldehydes to form carboxylic acids
AUTHOR(S): Mazitschek, Ralph; Mulbaier, Marcel; Giannis, Athanassios
CORPORATE SOURCE: Institut fur Organische Chemie Universitat Leipzig, Leipzig, 04103, Germany
SOURCE: Angewandte Chemie, International Edition (2002), 41(21), 4059-4061
CODEN: ACIEF5; ISSN: 1433-7851
PUBLISHER: Wiley-VCH Verlag GmbH
& Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:254580
AB Primary alcs. and aldehydes were oxidized by 1-hydroxy-1,2-benziodoxole-3(1H)-one 1-oxide in presence of the O-nucleophiles 2-hydroxypyridine, 1-hydroxybenzotriazole, and N-hydroxysuccinimide (NHS) to give carboxylic acids. The NHS-mediate oxidation yielded active ester (O-succinimidyl) in most cases.
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 8 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:675821 CAPLUS
DOCUMENT NUMBER: 137:222033
TITLE: Compositions and methods for enhancing drug delivery across and into ocular tissues
INVENTOR(S): Rothbard, Jonathan B.; Wender, Paul A.; McGrane, P. Leo; Sista, Lalitha Vs; Kirschberg, Thorsten A.
PATENT ASSIGNEE(S): Cellgate, Inc., USA
SOURCE: PCT Int. Appl., 119 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002067917	A1	20020906	WO 2002-US5804	20020225 <--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2002127198	A1	20020912	US 2001-792480	20010223 <--
US 6669951	B2	20031230		
CA 2438784	A1	20020906	CA 2002-2438784	20020225 <--
AU 2002245529	A1	20020912	AU 2002-245529	20020225 <--
EP 1372626	A1	20040102	EP 2002-713692	20020225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004533414	T	20041104	JP 2002-567285	20020225
MX 2003PA07590	A	20031204	MX 2003-PA7590	20030822 <--

PRIORITY APPLN. INFO.:	US 2001-792480	A	20010223
	US 1999-150510P	P	19990824
	US 2000-648400	A2	20000824
	WO 2002-US5804	W	20020225

OTHER SOURCE(S): MARPAT 137:222033

AB Compns. and methods for enhancing delivery of drugs, diagnostic and other agents across epithelial tissues, including into and across ocular tissues and blood-brain barrier are provided. The compns. and methods employ a delivery enhancing transporter that has sufficient guanidino or amidino side chain moieties to enhance delivery of a compound conjugated to the reagent across one or more layers of the tissue, compared to the non-conjugated compound The delivery-enhancing polymers include, for example, poly-arginine mols. that are preferably between about 6 and 25 residues in length. For example, a series of structural characteristics including sequence length, amino acid composition, and chirality that influence the ability of Tat49-57 to enter cells is identified. These characteristics provided the blueprint for the design of a series of novel peptoids, of which 17 members were synthesized and assayed for cellular uptake. This research established that the peptide backbone and hydrogen bonding along that backbone are not required for cellular uptake, that the guanidino head group is superior to other cationic subunits, and most significantly, that an extension of the alkyl chain between the backbone and the head group provides superior transporters. In addition to better uptake performance, these novel peptoids offer several advantages over Tat49-57 including cost-effectiveness, ease of synthesis of analogs, and protease stability. These features along with their significant water solubility (>100 mg/mL) indicate that these novel peptoids could serve as effective transporters for the mol. delivery of drugs, drug candidates, and other agents into cells.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 9 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	2002:505440 CAPLUS
DOCUMENT NUMBER:	137:58577
TITLE:	Photoactivatable nucleic acid derivatives, their synthesis and use in preparing immobilized nucleic acid arrays
INVENTOR(S):	Guire, Patrick E.; Swanson, Melvin J.; Opperman, Gary W.
PATENT ASSIGNEE(S):	USA
SOURCE:	U.S. Pat. Appl. Publ., 11 pp., Cont.-in-part of U. S.

Ser. No. 916,913.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002086989	A1	20020704	US 1998-28806	19980224 <--
US 6506895	B2	20030114		
US 6121027	A	20000919	US 1997-916913	19970815 <--
EP 1577670	A2	20050921	EP 2005-6595	19980811
EP 1577670	A3	20051207		
R: DE, ES, FR, GB, IT				
CA 2321098	A1	19990902	CA 1999-2321098	19990223 <--
WO 9943688	A1	19990902	WO 1999-US3862	19990223 <--
W: AU, CA, JP, MX				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9928729	A	19990915	AU 1999-28729	19990223 <--
AU 758328	B2	20030320		
EP 1064292	A1	20010103	EP 1999-909547	19990223 <--
EP 1064292	B1	20060920		
R: DE, ES, FR, GB, IT, IE				
JP 2002504695	T	20020212	JP 2000-533440	19990223 <--
US 6514734	B1	20030204	US 2000-591564	20000609 <--
AU 768490	B2	20031211	AU 2001-76081	20010921 <--
US 2003181423	A1	20030925	US 2003-357131	20030203 <--

PRIORITY APPLN. INFO.:		
US 1997-916913	A2	19970815
US 1998-28806	A	19980224
AU 1998-91973	A3	19980811
EP 1998-944435	A3	19980811
WO 1999-US3862	W	19990223
US 2000-591564	A1	20000609

AB A photoactivatable nucleic acid derivative composition in which one or more photoreactive group(s) are bound to a natural or synthetic nucleic acid is disclosed. The photoreactive groups may be a ketone such as benzophenone, or may be a group which generates a nitrene or carbene. The photoreactive groups can be bound to the nucleic acid before, during or after its formation, and can thereafter be activated in order to attach the nucleic acid to another mol., e.g., to the surface of a solid support. Also described is a method of preparing such a composition in which a nucleic acid derivative containing a thermochem. reactive group is reacted with a compound containing a reactive group and a photoreactive group. For example, reactions between amines and N-oxysuccinimde esters, between carboxylic acid chlorides and amines, or between a maleimide and a sulfhydryl group may be used to prepare the photoactive nucleic acid derivative Alternatively, nucleotide monomers containing a photoreactive group may be used in synthesis of oligonucleotides/nucleic acids. Thus, N-[3-(4-benzoylbenzamido)propyl]methacrylamide (BBA-APMA) and N-succinimidyl 6-maleimidohexanoate (MAL-EAC-NOS) were synthesized and, using these compds., a copolymer of acrylamide, BBA-APMA, and MAL-EAC-NOS was also synthesized. An amino-terminated oligonucleotide was immobilized on polypropylene or polyvinyl chloride microwell plates by irradiation in the presence of this copolymer.

L42 ANSWER 10 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:504749 CAPLUS

DOCUMENT NUMBER: 137:79227
TITLE: Novel functional peptide nucleic acid monomer and process for producing the same
INVENTOR(S): Ikeda, Hisafumi; Saito, Isao; Kitagawa, Fumihiko
PATENT ASSIGNEE(S): Applied Biosystems Japan Ltd., Japan
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002051797	A1	20020704	WO 2001-JP8120	20010919 <--
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
EP 1357112	A1	20031029	EP 2001-970133	20010919 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
US 2004101839	A1	20040527	US 2003-250592	20031224
US 7282575	B2	20071016		

PRIORITY APPLN. INFO.: JP 2000-394669 A 20001226
WO 2001-JP8120 W 20010919
OTHER SOURCE(S): CASREACT 137:79227; MARPAT 137:79227
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A peptide nucleic acid (PNA) monomer represented by the following general formula A-(CH2)nCO-B [I; wherein A = Q or Q1 (wherein X = OH, Z = O; X = NH2, Z = H2N+; or X = NMe2, Z = Me2N+), Q2, Q3, Q4 (wherein R = hydrogen, NO2, NH2, NHCbz, bromine, fluorine, chlorine, or SO3Na2), Q5, 3-(4-dimethylaminophenylazo)phenyl, 4-(4-dimethylaminophenylazo)phenylsulfonylamino, 2-(4-hydroxyphenylazo)benzoylamino, 5-dimethylaminonaphthalenesulfonylamino, 1-pyrenecarbonyl, 1-pyrenylmethyl, 1-pyrenesulfonylamino, 6,7,8-trimethyl-1,3-dioxo-2,5-dihydro-2,4-diazaphenazin-2-yl, 4-methylcoumarin-7-ylaminocarbonyl, 4-trifluoromethylcoumarin-7-ylaminocarbonyl, 4-methyl-2-oxo-1,2-dihydroquinoin-7-ylaminocarbonyl, 2-oxo-1,2-dihydroquinoin-3-ylaminocarbonyl, etc.; B is OH, pentafluorophenyloxy, succinimidyloxy, N-carboxylmethyl-N-[2-(tert-butoxycarbonylamino)ethyl]amino; n = an integer of 1 to 4] is prepared A PNA monomer I [A, N = same as above; B = N-carboxylmethyl-N-[2-(tert-butoxycarbonylamino)ethyl]amino] is prepared by amidation of an active ester I (A, n = same as above; B = pentafluorophenyloxy, succinimidyloxy) with tert-butoxycarbonylaminoethylamine or an ω-amino acid derivative, in particular 2-[N-[2-(tert-butoxycarbonylamino)ethyl]amino]acetic acid (II). This process is convenient for the preparation of a photofunctional PNA monomer which is unstable under alkali condition. Thus, to a solution of 100 mg 2-(5,7,8-trimethyl-1,3-dioxo-2,5-dihydro-2,4-diazaphenazin-2-yl)acetic acid and 70.2 mg pentafluorophenol in 10 mL DMF was added 73.2 mg 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride (EDC) at 0° and stirred at 0° for 1 h and at room temperature for 12 h to give 85% 2,3,4,5,6-pentafluorophenyl 2-(5,7,8-trimethyl-1,3-dioxo-2,5-dihydro-2,4-diazaphenazin-2-yl)acetate (III). To a solution of the active

ester III (100 mg) and 45.4 mg II in 10 mL DMF was added 36.3 μL diisopropylethylamine and stirred at room temperature for 15 h to give 85% 2-[N-[2-(tert-butoxycarbonylamino)ethyl]-2-[(5,7,8-trimethyl-1,3-dioxo-2,5-dihydro-2,4-diazaphenazin-2-yl)acetyl]amino]acetic acid.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 11 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:465982 CAPLUS
DOCUMENT NUMBER: 137:47213
TITLE: Preparation of fused pyrimidinones and benzodioxaborolidinylpropylaminopyrrolo[1,2-a]pyrimidines as inhibitors of hepatitis C ns3 protease for the treatment of hepatitis C and other viral diseases
INVENTOR(S): Glunz, Peter W.; Douty, Brent D.; Han, Wei
PATENT ASSIGNEE(S): Bristol-Myers Squibb Pharma Company, USA
SOURCE: PCT Int. Appl., 270 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002048116	A2	20020620	WO 2001-US47911	20011212 <--
WO 2002048116	A3	20071025		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, AP, EA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, EP, OA				
AU 200230763	A	20020624	AU 2002-30763	20011212 <--
US 2003064962	A1	20030403	US 2001-15304	20011212 <--
US 6653295	B2	20031125		

PRIORITY APPLN. INFO.: US 2000-255290P P 20001213
WO 2001-US47911 W 20011212

OTHER SOURCE(S): MARPAT 137:47213
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Fused pyrimidinones I [A1 = (un)substituted CH2, CH2CH2, CH2CH2CH2, A2CH2, A2CH2CH2, CH2A2CH2; A2 = O, S, (un)substituted imino; A3 = H, R9CO, R9O, R9S, R9CONH, R9NHCO, etc.; W = (un)substituted boronic acid ester, QCOCO, QNHCOCO, QOCOCO, QNHCOCF2CO, COQ3, F3CCO, F3CCF2CO, OHC, amino acid residue; Q3 = (un)substituted aryl, heterocyclyl; R1 = H, F, (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl; R2 = H, alkyl; Q, R3, R9 = (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl; R6, R13 = H, (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl, aralkyl, cycloalkylalkyl; R3R13 = (un)substituted

carbocyclic ring, alkylidene] and particularly dioxaborolylpropylamino pyrrolopyriminecarboxamides such as II are prepared as inhibitors of hepatitis C viral protein ns3 protease for the treatment of hepatitis C and other viral diseases. E.g., esterification of L-pyroglutamic acid with AcOCMe3 and HClO4, thionation with Lawesson's reagent, S-methylation with MeI, and amidation with NH4Cl gives nonracemic aminopyrrolinecarboxylate III. Treatment of III with di-Me 2-(methoxymethylene)malonate, hydrolysis of the Me ester moiety with LiOH, preparation of the acyl azide with diphenylphosphoryl azide and Curtius rearrangement in the presence of PhCH2OH, and hydrolysis of the tert-Bu ester with CF3CO2H gives pyrrolo[1,2-a]pyrimidine IV. Coupling of IV with an α-allyl aminomethylboronate pinanediol ester gives II. I inhibit hepatitis C ns3 protease with IC50 values of <100 μM. Pharmaceutical compns. containing I are given.

L42 ANSWER 12 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:408568 CAPLUS
DOCUMENT NUMBER: 137:8158
TITLE: Manufacture and uses of Hollow Polymeric microspheres
INVENTOR(S): Walt, David R.; Mandal, Tarun K.; Fleming, Michael S.
PATENT ASSIGNEE(S): Tufts University, USA
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002041987	A2	20020530	WO 2001-US51278	20011025 <--
WO 2002041987	A3	20030605		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002039780	A5	20020603	AU 2002-39780	20011025 <--
US 2002172716	A1	20021121	US 2001-33389	20011025 <--
US 6720007	B2	20040413		
US 2004219360	A1	20041104	US 2004-823367	20040412

PRIORITY APPLN. INFO.:		
US 2000-243104P	P	20001025
US 2001-33389	A	20011025
WO 2001-US51278	W	20011025

AB The invention features core-shell microsphere compns., hollow polymeric microspheres, and methods for making the microspheres. The microspheres are characterized as having a polymeric shell with consistent shell thickness. One method includes polymerizing one or more monomers or a polymerizable grafted unit over a solid inorg. core microsphere to form a shell, and then the solid core is etched away by acid. The solid inorg. core has had the polymer initiator previously attached to the surface. Another method mixes polymeric nanospheres over solid inorg. core microsphere, the mixture heated, and the solid core is etched away. The hollow microspheres can be filled with dye materials, therapeutic materials, or other substances.

L42 ANSWER 13 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:175766 CAPLUS
DOCUMENT NUMBER: 137:155063
TITLE: Evaluation of Morphogenic Regulatory Activity of Farnesoic acid and Its Derivatives against Candida albicans Dimorphism
AUTHOR(S): Kim, Sanghee; Kim, Eunkyung; Shin, Dong-Sun; Kang, Heonjoong; Oh, Ki-Bong
CORPORATE SOURCE: Seoul National University, Natural Products Research Institute, Seoul, Jongro, 110-460, S. Korea
SOURCE: Bioorganic & Medicinal Chemistry Letters (2002), 12(6), 895-898
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:155063
AB A series of farnesoic acid derivs. was prepared and their morphogenic regulatory activities were evaluated. Their inhibitory activities against yeast cell growth and yeast-to-hypha transition examined in Candida albicans cells are dependent upon the chain length as well as the substitution patterns on the isoprenoid template. The preliminary structure-activity relationship of these compds. is described to elucidate the essential structural requirements.
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 14 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:119134 CAPLUS
DOCUMENT NUMBER: 138:333559
TITLE: An Inhibitor of the Human UDP-GlcNAc 4-Epimerase Identified from a Uridine-Based Library. A Strategy to Inhibit O-Linked Glycosylation
AUTHOR(S): Winans, Katharine A.; Bertozzi, Carolyn R.
CORPORATE SOURCE: Department of Chemistry, Center for New Directions in Organic Synthesis, University of California, Berkeley, CA, 94720, USA
SOURCE: Chemistry & Biology (2002), 9(1), 113-129
CODEN: CBOLE2; ISSN: 1074-5521
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:333559
AB The biol. study of O-linked glycosylation is particularly problematic, as chemical tools to control this modification are lacking. An inhibitor of the UDP-GlcNAc 4-epimerase that synthesizes UDP-GalNAc, the donor initiating O-linked glycosylation, would be a powerful reagent for reversibly inhibiting O-linked glycosylation. We synthesized a 1338 member library of uridine analogs directed to the epimerase by virtue of substrate mimicry. Screening of the library identified an inhibitor with a Ki value of 11 μM. Tests against related enzymes confirmed the compound's specificity for the UDP-GlcNAc 4-epimerase. Inhibitors of a key step of O-linked glycan biosynthesis can be discovered from a directed library screen. Progeny thereof may be powerful tools for controlling O-linked glycosylation in cells.
REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 15 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:905597 CAPLUS
DOCUMENT NUMBER: 136:263357
TITLE: Nucleosides derived from urocanic acid: potential ligands for CG base pairs
AUTHOR(S): Purwanto, Maria G. M.; Lengeler, David; Weisz, Klaus
CORPORATE SOURCE: Institut fur Chemie der Freien Universitat Berlin, Berlin, D-14195, Germany
SOURCE: Tetrahedron Letters (2001), Volume Date 2002, 43(1), 61-64
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 136:263357
AB A nucleoside analog based on imidazole-4-acrylamide (urocanamide) was synthesized and studied for its use as a specific ligand for a cytosine-guanosine Watson-Crick base pair. One- and two-dimensional 1H NMR expts. in methylene chloride at ambient and low temps. not only indicate the strength of association but also confirm specific binding of the novel nucleoside to the base pair through the formation of two hydrogen bonds.
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 16 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:863431 CAPLUS
DOCUMENT NUMBER: 136:2448
TITLE: Sensor for analyte detection
INVENTOR(S): Bauer, Alan Joseph
PATENT ASSIGNEE(S): Biosensor Systems Design., Inc., USA
SOURCE: U.S., 25 pp., Cont.-in-part of U.S. 6,096,497.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6322963	B1	20011127	US 2000-701906	20001205 <--
US 6096497	A	20000801	US 1998-110686	19980707 <--
WO 9966322	A1	19991223	WO 1999-IL309	19990610 <--

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:		
IL 1998-124903	A	19980615
US 1998-110686	A2	19980707
IL 1998-125720	A	19980811
IL 1998-127019	A	19981112
IL 1999-129754	A	19990504
WO 1999-IL309	W	19990610
IS 1998-124903	A	19980615

AB A sensor for detecting analytes is described. Analyte presence or concentration is determined through measurement of changes in induced electromotive force, current or other elec. property in a base member during analyte exposure to the sensor. According to one class of embodiments, the present device immobilizes natural or synthetic macromols. sufficiently close to an elec.-conductive base member to insure that any alteration in the motion and/or electrostatic fields of the macromols. during interaction with a predetd. analyte will induce an increased electromotive force in the base member.
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 17 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:598434 CAPLUS
DOCUMENT NUMBER: 135:177719
TITLE: Target molecule attachment to surfaces
INVENTOR(S): Chappa, Ralph A.; Hu, Sheau-Ping; Swan, Dale G.; Swanson, Melvin J.; Guire, Patrick E.
PATENT ASSIGNEE(S): Surmodics, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 26 pp., Cont.-in-part of U.S. 5,858,653.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001014448	A1	20010816	US 1999-227913	19990108 <--
US 6465178	B2	20021015		
US 5858653	A	19990112	US 1997-940213	19970930 <--
CA 2360000	A1	20000713	CA 2000-2360000	20000110 <--
WO 2000040593	A2	20000713	WO 2000-US535	20000110 <--
WO 2000040593	A3	20001228		
W: AU, CA, JP, MX				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1141385	A2	20011010	EP 2000-903199	20000110 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002534663	T	20021015	JP 2000-592301	20000110 <--
AU 778265	B2	20041125	AU 2000-24979	20000110
US 2003113792	A1	20030619	US 2000-521545	20000309 <--
US 6762019	B2	20040713		
MX 2001PA06935	A	20011011	MX 2001-PA6935	20010706 <--
US 2003148308	A1	20030807	US 2002-192917	20020709 <--
US 2004209305	A1	20041021	US 2004-844667	20040512
US 7300756	B2	20071127		
US 2005170427	A1	20050804	US 2005-101271	20050406

PRIORITY APPLN. INFO.:

US 1997-940213	A2	19970930
US 1999-227913	A	19990108
WO 2000-US535	W	20000110
US 2000-521545	A1	20000309
US 2002-192917	A3	20020709

AB Method and reagent composition for covalent attachment of target mols., such as nucleic acids, onto the surface of a substrate are described. The reagent composition includes groups capable of covalently binding to the target mol. Optionally, the composition can contain photoreactive groups for use in

attaching the reagent composition to the surface. The reagent composition can be used to provide activated slides for use in preparing microarrays of nucleic acids. Glass slides coated with a copolymer of acrylamide, N-[3-(4-benzoylbenzamido)propyl]methacrylamide (BBA-APMA), and N-succinimidyl 6-maleimidohexanoate (MAL-EAC-NOS) (preparation given) were reacted with amine-modified PCR products from the β-galactosidase gene using microarraying spotting pins.

L42 ANSWER 18 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:565638 CAPLUS
DOCUMENT NUMBER: 135:266385
TITLE: 4:3-β-Naphthapyrone-4-acetic acid N-hydroxy-succinimidyl ester as a fluorescent labeling reagent for amino acids and oligopeptides in high-performance liquid chromatography
AUTHOR(S): Liu, Xin; Wang, Hong; Liang, Shu-Cai; Zhang, Hua-Shan
CORPORATE SOURCE: Department of Chemistry, Wuhan University, Wuhan, 430072, Peop. Rep. China
SOURCE: Chromatographia (2001), 53(5/6), 326-330
CODEN: CHRGB7; ISSN: 0009-5893
PUBLISHER: Friedrich Vieweg & Sohn Verlagsgesellschaft mbH
DOCUMENT TYPE: Journal
LANGUAGE: English
AB 4:3-β-Naphthapyrone-4-acetic acid N-hydroxysuccinimidyl ester (NPA-OSu) is a highly sensitive and moderately reactive derivatizing reagent with a naphthapyrone moiety as fluorophore and an N-hydroxysuccinimidyl active ester as reactive group toward amino compds. It is readily prepared in two steps. The fluorescence properties of NPA-OSu and its hydrolysis product were studied in detail, and the conditions for derivatization and separation of the NPA-OSu derivs. of some amino acids and oligopeptides were studied. At λex = 352 nm and λem = 422 nm the detection limits (signal-to-noise ratio = 3) for amino acids and oligopeptides reached fmol levels for injection of 20 μL; this sensitivity was comparable with that obtained using 7-(diethylamino)coumarin-3-carboxylic acid succinimidyl ester as derivatizing reagent in the anal. of amino acids by capillary electrophoresis with laser-induced-fluorescence detection.
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 19 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:241696 CAPLUS
DOCUMENT NUMBER: 134:265244
TITLE: Antibody catalysis of enantio- and diastereo-selective aldol reactions
INVENTOR(S): Barbas, Carlos F.; Lerner, Richard A.; Zhong, Guofu
PATENT ASSIGNEE(S): The Scripps Research Institute, USA
SOURCE: U.S., 15 pp., Cont. of U.S. Ser. No. 415,453.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6210938	B1	20010403	US 1999-458367	19991209 <--
US 6294374	B1	20010925	US 1999-415453	19991008 <--

CA 2389250	A1	20010419	CA 2000-2389250	20001006 <--
WO 2001027145	A1	20010419	WO 2000-US27777	20001006 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1228087	A1	20020807	EP 2000-968865	20001006 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
US 2001018201	A1	20010830	US 2001-824279	20010402 <--
US 6309881	B2	20011030		

PRIORITY APPLN. INFO.:	US 1999-415453	A1 19991008
	US 1999-458367	A 19991209
	WO 2000-US27777	W 20001006

OTHER SOURCE(S): CASREACT 134:265244; MARPAT 134:265244

AB Nine efficient aldolase antibodies were generated using a sulfone β-diketone hapten. This hapten combines, in a single mol., structural components employed for reactive immunization with structural components employed for forming a transition state analog of the aldol reaction. Characterization of 2 of these antibodies reveals that they are highly proficient (≤1000-fold better than any other antibody catalyst) and enantioselective catalysts for aldol and retro-aldol reactions and exhibit enantio- and diastereo- selectivities opposite that of antibody 38C2.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 20 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:221918 CAPLUS
DOCUMENT NUMBER: 134:249193
TITLE: Test kit and electrode sensor for multi-array, multi-specific electrochemiluminescence testing
INVENTOR(S): Wohlstadter, Jacob N.; Wilbur, James; Sigal, George; Martin, Mark; Guo, Liang-Hong; Fischer, Alan; Leland, Jon; Billadeau, Mark A.
PATENT ASSIGNEE(S): Meso Scale Technologies, LLC, USA
SOURCE: U.S., 103 pp., Cont.-in-part of U.S. 6,066,448. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6207369	B1	20010327	US 1996-715163	19960917 <--
US 6066448	A	20000523	US 1996-611804	19960306 <--
CN 1661115	A	20050831	CN 2005-10005720	19960306
ZA 9601925	A	19970805	ZA 1996-1925	19960308 <--
US 6140045	A	20001031	US 1997-814085	19970306 <--
CA 2265828	A1	19980326	CA 1997-2265828	19970917 <--
WO 9812539	A1	19980326	WO 1997-US16942	19970917 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ,				

PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9746495	A	19980414	AU 1997-46495	19970917	<--
AU 743567	B2	20020131			
ZA 9708380	A	19980417	ZA 1997-8380	19970917	<--
EP 944820	A1	19990929	EP 1997-945249	19970917	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
JP 2001503856	T	20010321	JP 1998-514984	19970917	<--
US 6673533	B1	20040106	US 1997-932110	19970917	
TW 541416	B	20030711	TW 1997-86113584	19971017	<--
KR 2000036176	A	20000626	KR 1999-702230	19990316	<--
US 2001021534	A1	20010913	US 2001-771796	20010129	<--
AU 200229296	A	20020523	AU 2002-29296	20020328	<--
US 2004086423	A1	20040506	US 2003-693441	20031024	
US 7015046	B2	20060321			
AU 2005201886	A1	20050526	AU 2005-201886	20050504	
AU 2005201886	B2	20070906			
JP 2006047321	A	20060216	JP 2005-296368	20051011	
US 2006068499	A1	20060330	US 2005-264535	20051031	
US 2006172340	A1	20060803	US 2005-300808	20051214	

PRIORITY APPLN. INFO.:

US 1995-402076	B2	19950310
US 1995-402277	B2	19950310
US 1996-611804	A2	19960306
CN 1996-193840	A3	19960306
JP 1996-527737	A3	19960306
US 1996-12957P	P	19960306
WO 1996-US3190	A	19960306
US 1996-715163	A	19960917
US 1997-932110	A3	19970917
WO 1997-US16942	W	19970917
US 2001-771796	B1	20010129
AU 2002-29296	A3	20020328
US 2003-693441	A1	20031024

AB Materials and methods are provided for producing patterned multi-array, multi-sp. surfaces for use in diagnostics. The invention provides for electrochemiluminescence methods for detecting or measuring an analyte of interest. It also provides for novel electrodes for ECL assays. Materials and methods are provided for the chemical and/or phys. control of conducting domains and reagent deposition for use multiply specific testing procedures. An ECL immunoassay for TSH used a composite electrode of EVA and carbon fibrils. A DNA hybridization assay was performed on a fibril-polymer composite.

REFERENCE COUNT: 82 THERE ARE 82 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 21 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:838129 CAPLUS
DOCUMENT NUMBER: 134:5118
TITLE: Derivatized oligonucleotides having improved uptake and other properties
INVENTOR(S): Manoharan, Muthiah; Cook, Phillip Dan; Bennett, Clarence Frank
PATENT ASSIGNEE(S): ISIS Pharmaceuticals, Inc., USA
SOURCE: U.S., 25 pp., Cont.-in-part of U.S. Ser. No. 782,374, abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 326
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
US 6153737	A	20001128	US 1994-211882	19940422	<--
WO 9110671	A1	19910725	WO 1991-US243	19910111	<--
W: AU, BR, CA, FI, HU, JP, KR, NO, US					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE					
EP 1418179	A2	20040512	EP 2003-78862	19910111	
EP 1418179	A3	20060308			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE					
CA 2089376	A1	19920214	CA 1991-2089376	19910812	<--
EP 1443051	A2	20040804	EP 2004-76246	19910812	
EP 1443051	A3	20050817			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE					
AT 318273	T	20060315	AT 1991-915355	19910812	
ES 2259177	T3	20060916	ES 1991-915355	19910812	
WO 9307883	A1	19930429	WO 1992-US9196	19921023	<--
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, PL, RO, RU, US					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG					
EP 1331011	A2	20030730	EP 2003-76286	19921023	<--
EP 1331011	A3	20031217			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, IE					
US 5578718	A	19961126	US 1993-116801	19930903	<--
JP 08098700	A	19960416	JP 1995-175173	19950711	<--
JP 3585583	B2	20041104			
AU 9726244	A	19971106	AU 1997-26244	19970624	<--
AU 713740	B2	19991209			
US 6232463	B1	20010515	US 1998-128508	19980804	<--
US 6265558	B1	20010724	US 1999-383856	19990826	<--
US 6395492	B1	20020528	US 2000-633659	20000807	<--
US 2002177150	A1	20021128	US 2002-73718	20020211	<--
US 2003064492	A1	20030403	US 2002-154993	20020523	<--
US 6919439	B2	20050719			
US 2003175751	A1	20030918	US 2002-284742	20021031	<--
US 7235650	B2	20070626			
US 2005043219	A1	20050224	US 2004-755166	20040109	
US 7125975	B2	20061024			
US 2005158727	A1	20050721	US 2004-755109	20040109	
US 7122649	B2	20061017			

PRIORITY APPLN. INFO.:

US 1990-463358	B2	19900111
US 1990-566977	B2	19900813
WO 1991-US243	A2	19910111
US 1991-782374	B2	19911024
WO 1992-US9196	W	19921023
EP 1991-903066	A3	19910111
EP 1991-915355	A3	19910812
EP 1992-923139	A3	19921023
AU 1993-38025	A3	19930225
US 1993-116801	A2	19930903
US 1994-211882	A2	19940422
US 1995-458396	A1	19950602
US 1997-924326	A1	19970905
US 1997-948151	A1	19971009
US 2000-633659	A3	20000807

US 2002-73718 A1 20020211
US 2002-154993 A1 20020523

AB Linked nucleosides having at least one functionalized nucleoside that bears a substituent such as a steroid mol., a reporter mol., a non-aromatic lipophilic mol., a reporter enzyme, a peptide, a protein, a water soluble vitamin, a lipid soluble vitamin, an RNA cleaving complex, a metal chelator, a porphyrin, an alkylator, a pyrene, a hybrid photo-nuclease/intercalator, or an aryl azide photo-crosslinking agent exhibit increased cellular uptake and other properties. The substituent can be attached at the 2'-position of the functionalized nucleoside via a linking group. If at least a portion of the remaining linked nucleosides are 2'-deoxy-2'-fluoro, 2'-O-methoxy, 2'-O-ethoxy, 2'-O-propoxy, 2'-O-aminoalkoxy or 2'-O-allyloxy nucleosides, the substituent can be attached via a linking group at any of the 3' or the 5' positions of the nucleoside or on the heterocyclic base of the nucleoside or on the inter-nucleotide linkage linking the nucleoside to an adjacent nucleoside.

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 22 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:433344 CAPLUS
DOCUMENT NUMBER: 133:79341
TITLE: Immunostimulating and vaccine compositions employing saponin analog adjuvants and uses thereof
INVENTOR(S): Marciani, Dante J.
PATENT ASSIGNEE(S): Galenica Pharmaceuticals, Inc., USA
SOURCE: U.S., 40 pp., Cont.-in-part of U.S. 5,977,081.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
US 6080725	A	20000627	US 1999-290606		19990413	<--
US 5977081	A	19991102	US 1998-81647		19980520	<--
PRIORITY APPLN. INFO.:			US 1997-47129P	P	19970520	
			US 1998-80389P	P	19980402	
			US 1998-81647	A2	19980520	

OTHER SOURCE(S): MARPAT 133:79341

AB The present invention is directed to vaccines comprising (1) one or more bacterial, viral or tumor-associated antigens; and (2) one or more saponin-lipophile conjugate in which a lipophilic moiety such as a lipid, fatty acid, polyethylene glycol or terpene is covalently attached to a non-acylated or desacylated triterpene saponin via a carboxyl group present on the 3-O-glucuronic acid of the triterpene saponin. The attachment of a lipophile moiety to the 3-O-glucuronic acid of a saponin such as Quillaja desacylsaponin, lucyoside P, or saponin from Gypsophila, Saponaria and Acanthophyllum enhances their adjuvant effects on humoral and cell-mediated immunity. Addnl., the attachment of a lipophile moiety to the 3-O-glucuronic acid residue of non- or des-acylsaponin yields a saponin analog that is easier to purify, less toxic, chemical more stable, and possesses equal or better adjuvant properties than the original saponin.

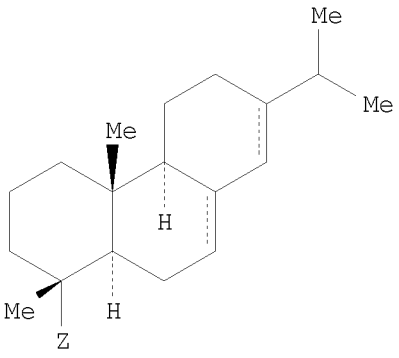
REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 23 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:117021 CAPLUS

DOCUMENT NUMBER: 132:166361
TITLE: Saturated and unsaturated abietane derivatives, derived conjugates and uses in a diagnostic composition, a reagent and a device
INVENTOR(S): Charles, Marie-helene; Piga, Nadia; Battail-Poirot, Nicole; Veron, Laurent; Delair, Thierry; Mandrand, Bernard
PATENT ASSIGNEE(S): Bio Merieux, Fr.
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000007982	A1	20000217	WO 1999-FR1846	19990727 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2781802	A1	20000204	FR 1998-10084	19980731 <--
FR 2781802	B1	20010511		
CA 2339102	A1	20000217	CA 1999-2339102	19990727 <--
AU 9949173	A1	20000228	AU 1999-49173	19990727 <--
EP 1100773	A1	20010523	EP 1999-932981	19990727 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 2002155496	A1	20021024	US 2001-771554	20010130 <--

PRIORITY APPLN. INFO.: FR 1998-10084 A 19980731
WO 1999-FR1846 W 19990727
OTHER SOURCE(S): MARPAT 132:166361
GI



I

AB The invention concerns a saturated or unsatd. abietane derivative (I) [Z = -COOR5, -CONR1R2, -COONR3R4, -COR6, -CON, -COOR5, -CHOHR7, -SR8, -OR8, -CN, -CNO, -CNS, -NCO, -NCS, -R1R2CR9; R1, R2, R3, R4 = H, alkyl, (un)substituted

aryl; alkene; alkyne; (un)substituted aminoacyl, (un)substituted peptidyl; R1, R2, or R3, R4 together can form a cycle or a heterocycle; R5 = H, alkyl, alkene, alkyne; aryl (un)substituted into C6-C20; R6 = H, halogen, alkyl, alkene, alkyne, aryl (un)substituted into C6-C20; R7, R8 = H, alkyl, alkene, alkyne; R9 = -CN, -CNO, -CNS, -NCO, -NCS]. The invention also concerns a derived conjugate with oligonucleotide, anti-alpha fetoprotein, oligomer or bovine serum albumin and the use of said derivative and said conjugate in a diagnostic composition, a reagent and a device.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 24 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:811446 CAPLUS

DOCUMENT NUMBER: 132:47205

TITLE: A sensor for analyte detection

INVENTOR(S): Bauer, Alan Joseph

PATENT ASSIGNEE(S): Biosensor Systems Design, Inc. (1998), USA

SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9966322	A1	19991223	WO 1999-IL309	19990610 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6096497	A	20000801	US 1998-110686	19980707 <--
AU 9941628	A	20000105	AU 1999-41628	19990610 <--
EP 1093583	A1	20010425	EP 1999-925262	19990610 <--
R: BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
US 6322963	B1	20011127	US 2000-701906	20001205 <--

PRIORITY APPLN. INFO.:

IL 1998-124903	A	19980615
US 1998-110686	A2	19980707
IL 1998-125720	A	19980811
IL 1998-127019	A	19981112
IL 1999-129754	A	19990504
IS 1998-124903	A	19980615
WO 1999-IL309	W	19990610

AB A sensor for detecting analytes of interest is described. Analyte presence or concentration is determined through measurement of changes in induced electromotive force, current or other elec. property in a base member during analyte exposure to the sensor. According to one class of embodiments, the present device immobilizes natural or synthetic macromols. sufficiently close to an elec.-conductive base member to insure that any alteration in the motion and/or electrostatic fields of the macromols. during interaction with a predetd. analyte induces an altered electromotive force in the base member. In one example, the sensor described is used for food inspection.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 25 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:45046 CAPLUS
DOCUMENT NUMBER: 130:121859
TITLE: Reagent having attracting and reacting groups for attaching target molecules to a surface
INVENTOR(S): Duran, Lise W.; Swanson, Melvin J.; Amos, Richard A.; Hu, Sheau-ping J.; Guire, Patrick E.
PATENT ASSIGNEE(S): Surmodics, Inc., USA
SOURCE: U.S., 19 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5858653	A	19990112	US 1997-940213	19970930 <--
CA 2304362	A1	19990408	CA 1998-2304362	19980925 <--
WO 9916907	A2	19990408	WO 1998-US20140	19980925 <--
WO 9916907	A3	19990819		
W: AU, CA, JP, MX				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9895828	A	19990423	AU 1998-95828	19980925 <--
AU 737391	B2	20010816		
EP 1019424	A2	20000719	EP 1998-949524	19980925 <--
EP 1019424	B1	20050112		
R: DE, ES, FR, GB, IT				
JP 2001518604	T	20011016	JP 2000-513975	19980925 <--
US 2001014448	A1	20010816	US 1999-227913	19990108 <--
US 6465178	B2	20021015		
US 2003113792	A1	20030619	US 2000-521545	20000309 <--
US 6762019	B2	20040713		
MX 200003045	A	20001110	MX 2000-3045	20000328 <--
US 2003148308	A1	20030807	US 2002-192917	20020709 <--
US 2004209305	A1	20041021	US 2004-844667	20040512
US 7300756	B2	20071127		
US 2005170427	A1	20050804	US 2005-101271	20050406

PRIORITY APPLN. INFO.:

US 1997-940213	A	19970930
WO 1998-US20140	W	19980925
US 1999-227913	A2	19990108
US 2000-521545	A1	20000309
US 2002-192917	A3	20020709

AB Disclosed are a method and reagent composition for covalent attachment of target mols., such as nucleic acids, onto the surface of a substrate. The reagent composition includes groups capable of attracting the target mol. as well as groups capable of covalently binding to the target mol., once attracted. Optionally, the composition can contain photoreactive groups for use in attaching the reagent composition to the surface. Microwell plates coated and photoreacted with a prepared random copolymer of acrylamide, N-[3-(4-benzoylbenzamido)propyl]methacrylamide (preparation given), N-succinimidyl 6-methacrylamidohexanoate (preparation given), and [3-(methacryloylamino)propyl]trimethylammonium chloride, provided significant binding of a 50-mer capture probe and good hybridization signals.

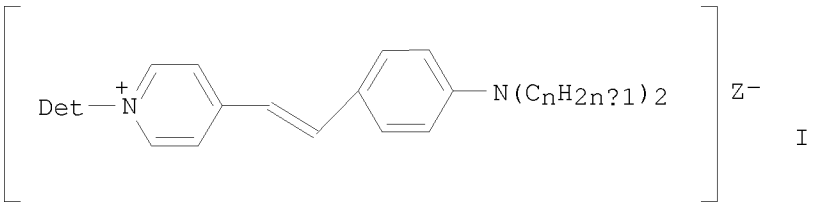
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 26 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:774292 CAPLUS
DOCUMENT NUMBER: 130:22307
TITLE: (Aminostyryl)pyridinium compounds for radiolabeling cell membranes, and preparation thereof
INVENTOR(S): Lambert, Carol; Mease, Ronnie C.; McAfee, John G.
PATENT ASSIGNEE(S): Research Corporation Technologies, Inc., USA
SOURCE: U.S., 13 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5840859	A	19981124	US 1996-673798	19960627 <--

PRIORITY APPLN. INFO.: US 1996-673798 19960627
OTHER SOURCE(S): MARPAT 130:22307
GI



I

AB Compds. I (n = 4-16; Det = organic group comprising radioisotope or capable of chelating radioisotope; Z- = 1 equivalent of biol. acceptable anion) are provided. I are useful to radiolabel cellular membranes, as of hematopoietic cells. I are preferably employed in vitro, in combination with a pharmaceutically acceptable carrier or vehicle, to label populations of mammalian cells, such as blood cells, including mixed leukocytes or lymphocytes. When introduced into a mammalian host, such as a human patient or animal, the labeled cells such as the leukocytes or lymphocytes, localize at a site of inflammation, infection, malignancy, or the like, thus enabling the imaging of the site, for diagnostic purposes or to enable the effective targeting of therapeutic agents.
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 27 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:197670 CAPLUS
DOCUMENT NUMBER: 128:254896
TITLE: Multi-array, multi-specific electrochemiluminescent testing
INVENTOR(S): Wohlstadter, Jacob N.; Wilbur, James; Sigal, George; Martin, Mark; Guo, Liang-Hong; Fischer, Alan; Leland, Jon; Billadeau, Mark A.; Helms, Larry R.; Darvari, Ramin
PATENT ASSIGNEE(S): Meso Scale Technologies, LLC, USA
SOURCE: PCT Int. Appl., 288 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9812539	A1	19980326	WO 1997-US16942	19970917 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 6207369	B1	20010327	US 1996-715163	19960917 <--
CA 2265828	A1	19980326	CA 1997-2265828	19970917 <--
AU 9746495	A	19980414	AU 1997-46495	19970917 <--
AU 743567	B2	20020131		
EP 944820	A1	19990929	EP 1997-945249	19970917 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001503856	T	20010321	JP 1998-514984	19970917 <--
AU 200229296	A	20020523	AU 2002-29296	20020328 <--

PRIORITY APPLN. INFO.:

US 1996-715163	A	19960917
US 1995-402076	B2	19950310
US 1995-402277	B2	19950310
US 1996-611804	A2	19960306
WO 1997-US16942	W	19970917

AB Materials and methods are provided for producing patterned multi-array, multi-sp. surfaces for use in diagnostics. The invention provides for electrochemiluminescence methods for detecting or measuring an analyte of interest. It also provides for novel electrodes for ECL assays. Materials and methods are provided for the chemical and/or phys. control of conducting domains and reagent deposition for use multiply specific testing procedures.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 28 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:341994 CAPLUS
DOCUMENT NUMBER: 127:34643
TITLE: Polymers of N-acryloylmorpholine derivative activated at one end and conjugates with bioactive materials and surfaces
INVENTOR(S): Veronese, Francesco M.; Schiavon, Oddone; Caliceti, Paolo; Sartore, Luciana; Ranucci, Elisabetta; Ferruti, Paolo
PATENT ASSIGNEE(S): Consiglio Nazionale Delle Ricerche, Italy
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5629384	A	19970513	US 1994-243869	19940517 <--

US 5631322 A 19970520 US 1995-475177 19950607 <--
PRIORITY APPLN. INFO.: US 1994-243869 A3 19940517
AB The title polymers having a single reactive moiety at one end of the polymer chain have the following structure R-Z-X-Y (R = N-acryloylmorpholine residue with d.p. 6-280, which yields number-average mol. weight 1000-40,000; Z-X-Y = polymer capping moiety; X = saturated residue of linear or branched aliphatic series CrH2r, r = 1-12; Y = reactive moiety, such as -OH, -CO2H, or -NH2; Z = moiety that readily reacts to cap a polymer free radical, e.g., S). The monofunctional polymer is a suitable alternative to monofunctional PEG for modification of substances having biol. and biotech. applications.

L42 ANSWER 29 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:192127 CAPLUS
DOCUMENT NUMBER: 126:185989
TITLE: Preparation of (aminostyryl)pyridinium compounds for radiolabelling cell membranes
INVENTOR(S): Lambert, Carol; Mease, Ronnie C.; Mcafee, John G.
PATENT ASSIGNEE(S): Research Corporation Technologies, Inc., USA; Lambert, Carol; Mease, Ronnie C.; Mcafee, John G.
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9702246	A1	19970123	WO 1995-US8460	19950706 <--
W: CA, JP, MX				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2225861	A1	19970123	CA 1995-2225861	19950706 <--

PRIORITY APPLN. INFO.: WO 1995-US8460 W 19950706
OTHER SOURCE(S): MARPAT 126:185989
AB (E)-R1ZCH:CHC6H4(NR2)-4 X (Z = pyridinio-4-yl)[I; R = CnH2n+1; R1 = organic group containing detectable radioisotope (sic); X = biol. acceptable anion; n = 4-16] were prepared Thus, R2CH:CHC6H4(NR2)-4 (R = decyl, R2 = 4-pyridyl) was N-alkylated by (E)-Bu3SnCH:CHCH2OTs (preparation given) and the product iodinated to give I [R = decyl, R1 = (E)-125ICH:CHCH2, X unspecified]. Data for biol. activity of I were given.

L42 ANSWER 30 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:169157 CAPLUS
DOCUMENT NUMBER: 126:225315
TITLE: Bicyclic heterocyclic derivatives having α1-adrenergic and 5HT1A serotonergic activities
INVENTOR(S): Leonardi, Amedeo; Motta, Gianni; Riva, Carlo; Testa, Rodolfo
PATENT ASSIGNEE(S): Recordati S.A., Chemical and Pharmaceutical Company, Switz.
SOURCE: U.S., 84 pp., Cont.-in-part of U.S. 5,474,994.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

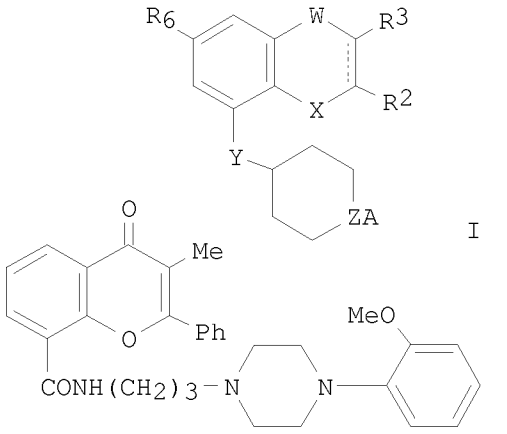
US 5605896	A	19970225	US 1994-299188	19940831	<--
US 5403842	A	19950404	US 1992-888775	19920526	<--
AU 9336296	A	19930913	AU 1993-36296	19930223	<--
RO 112111	B3	19970530	RO 1994-1404	19930223	<--
PL 175556	B1	19990129	PL 1993-304889	19930223	<--
RU 2128656	C1	19990410	RU 1994-43324	19930223	<--
SK 280143	B6	19990910	SK 1994-1007	19930223	<--
ZA 9301278	A	19931118	ZA 1993-1278	19930224	<--
LT 3038	B	19940925	LT 1993-354	19930224	<--
CN 1079738	A	19931222	CN 1993-105852	19930526	<--
CN 1040434	B	19981028			
US 5474994	A	19951212	US 1993-67861	19930526	<--
FI 9403876	A	19940823	FI 1994-3876	19940823	<--
NO 9403140	A	19940825	NO 1994-3140	19940825	<--

PRIORITY APPLN. INFO.:

IT 1992-MI408	A	19920225
US 1992-888775	A2	19920526
US 1993-67861	A2	19930526
EP 1993-301264	A	19930222
WO 1993-EP420	A	19930223

OTHER SOURCE(S): MARPAT 126:225315

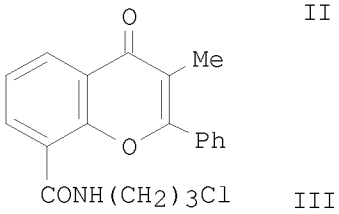
GI



I

2HCl

II

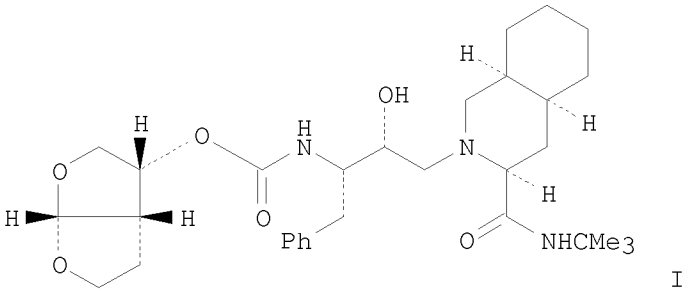


III

AB Bicyclic heterocyclic derivs., such as I [X = N, O, S; W = C(O), C(S), CH(OH), bond; R2 = H, optionally substituted alkyl, alkenyl, alkylnyl, carbocycle, heterocycle; R3 = alkyl, hydroxyalkyl, Ph, OH, alkoxy, alkoxyalkyl; R6 = H, halogen, NO2, NH2, AcNH, mono-, dialkylamino, CN, OH, alkoxy, alkyl; Y = CO, CO2, CONH, CH(OH), CH:CH, CH:CHCO2, CH:CHCONH, CH2NH, CH2NHCO, CH2NHSO2, CH2O, CH2S, NH, NHCO, NHCONH, NHSO2, O, S, SO2NH, CONHO, CSNH, NHCO2, COS, CONH(CH2)m, m = 1-6; Z = N, A = (un)substituted Ph, pyrimidinyl, 1,4-benzodioxan-8-yl, benzopyran-8-yl,

benzofuran-7-yl, dihydrobenzopyran-8-yl; Z = CH2N; Z = CH, A = one or two Ph, 4-FC6H4CO, 2-oxo-1-benzimidazolinyl, (CH2)nOA, n = 0-2], and their pharmaceutically acceptable salts useful as α1-adrenergic and 5HT1A serotonergic agents for the treatment of hypertension, urethral and lower urinary tract contractions, and other disorders are described. Thus, benzopyran II was prepared by heating 1-(2-methoxyphenyl)piperazine with benzopyran III at 180° for 5 h. II had IC50 = 29 nM for α1-adrenergic receptor binding, IC50 = 9 nM for 5HT1A receptor binding, ED25 = 45 μg/kg i.v. hypotensive effect and ED25 = 1.4 μg/kg in Na-induced urethral contractility assays.

L42 ANSWER 31 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:452240 CAPLUS
DOCUMENT NUMBER: 125:221638
TITLE: Nonpeptidal P2 Ligands for HIV Protease Inhibitors: Structure-Based Design, Synthesis, and Biological Evaluation
AUTHOR(S): Ghosh, Arun K.; Kincaid, John F.; Walters, D. Eric; Chen, Yan; Chaudhuri, Narayan C.; Thompson, Wayne J.; Culberson, Chris; Fitzgerald, Paula M. D.; Lee, Hee Yoon; et al.
CORPORATE SOURCE: Department of Chemistry, University of Illinois, Chicago, IL, 60607, USA
SOURCE: Journal of Medicinal Chemistry (1996), 39(17), 3278-3290
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB Design and synthesis of nonpeptidal bis-tetrahydrofuran ligands based upon the X-ray crystal structure of the HIV-1 protease-inhibitor Ro 31-8959 led to replacement of two amide bonds and a 10π-aromatic system of Ro 31-8959 class of HIV protease inhibitors. Detailed structure-activity studies have now established that the position of ring oxygens, ring size, and stereochem. are all crucial to potency. Of particular interest, I with (3S,3aS,6aS)-bis-Thf is the most potent inhibitor (IC50 value 1.8 ± 0.2 nM; CIC95 value 46 ± 4 nM) in this series. The X-ray structure of protein-inhibitor I has provided insight into the ligand-binding site interactions. As it turned out, both oxygens in the bis-Thf ligands are involved in hydrogen-bonding interactions with Asp 29 and Asp 30 NH present in the S2 subsite of HIV-1 protease. Stereoselective routes have been developed to obtain these novel ligands in optically pure form.

L42 ANSWER 32 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:35000 CAPLUS
DOCUMENT NUMBER: 124:232248
TITLE: Benzopyran derivatives having affinity for α1-adrenergic and 5HT1A-serotoninergic receptors
INVENTOR(S): Leonardi, Amedeo; Motta, Gianni; Riva, Carlo; Testa, Rodolfo
PATENT ASSIGNEE(S): Recordati S.A., Chemical and Pharmaceutical Company, Switz.
SOURCE: U.S., 37 pp. Cont.-in-part of U.S. 5,403,842.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5474994	A	19951212	US 1993-67861	19930526 <--
US 5403842	A	19950404	US 1992-888775	19920526 <--
EP 558245	A1	19930901	EP 1993-301264	19930222 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AU 9336296	A	19930913	AU 1993-36296	19930223 <--
RO 112111	B3	19970530	RO 1994-1404	19930223 <--
PL 175556	B1	19990129	PL 1993-304889	19930223 <--
SK 280143	B6	19990910	SK 1994-1007	19930223 <--
CN 1079738	A	19931222	CN 1993-105852	19930526 <--
CN 1040434	B	19981028		
FI 9403876	A	19940823	FI 1994-3876	19940823 <--
NO 9403140	A	19940825	NO 1994-3140	19940825 <--
US 5605896	A	19970225	US 1994-299188	19940831 <--

PRIORITY APPLN. INFO.:
US 1992-888775 A2 19920526
EP 1993-301264 A 19930222
IT 1992-MI408 A 19920225
WO 1993-EP420 A 19930223
US 1993-67861 A2 19930526

OTHER SOURCE(S): MARPAT 124:232248
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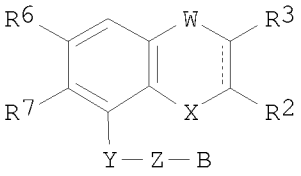

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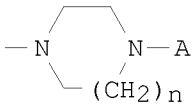

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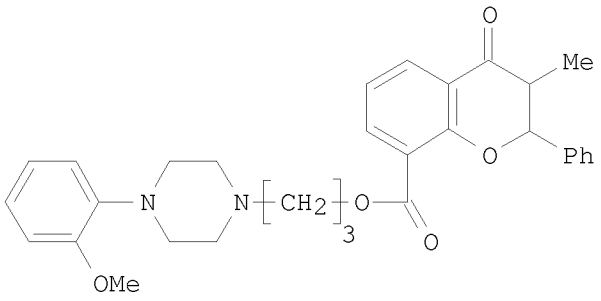

III

AB This invention provides bicyclic heterocyclic derivs. I wherein the dotted line represents a single or double bond; X represents a nitrogen, oxygen or sulfur atom, or an amino or alkylamino group, a sulfinyl or sulfonyl group; W represents a carbonyl, thiocarbonyl, hydroxymethylene, or a methylene group or a bond; or when X is nitrogen and W is a methine, the fused rings represent a quinoline; R2 represents, e.g, a hydrogen atom or an alkyl, alkenyl, alkynyl, carbocyclic or heterocyclic group, each of which groups may optionally be substituted; or R2 itself represents a trifluoromethyl or an aroyl group; R3 represents a hydrogen atom or an alkyl, hydroxyalkyl, alkyl-O-R4 Ph, hydroxy, or O-R4, wherein R4 represents an alkyl group optionally substituted with an aryl group; R6 represents a hydrogen or halogen atom or a nitro, amino, acylamino, alkylsulfonylamino, alkylamino, dialkylamino, cyano, hydroxy, alkoxy or alkyl group; R7 represents a hydrogen atom or an alkoxy group; Y = e.g., CO, COO, CONH; Z represents a linear or branched chain alkylene group having from 1 to 6 carbon atoms and optionally having one hydroxy substituent; B = e.g., II, n = 1 or 2, A = substituted Ph, 2-pyrimidinyl; and their pharmaceutically acceptable salts useful for the treatment of hypertension, urethral and lower urinary tract contractions, and other disorders. The compds. are also useful for binding α1-adrenergic and 5HT1A serotonergic receptors, in vitro or in vivo. Thus, e.g., esterification of 8-carboxy-3-methyl-4-oxo-2-phenyl-4H-1-benzopyran with 1-(3-chloropropyl)-4-(2-methoxyphenyl)piperazine followed by HCl treatment afforded 8-{3-[4-(2-methoxyphenyl)-1-piperazinyl]propoxycarbonyl}-3-methyl-4-oxo-2-phenyl-4H-1-benzopyran dihydrochloride (III.2HCl) which exhibited IC50's of 20 and 19 nM, resp., for α1 and 5-HT1A receptor binding. Data were also presented for the effect of I on K+ stimulation of rat bladder strips, and on urethral contractions and blood pressure in dogs.

L42 ANSWER 33 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:996262 CAPLUS
DOCUMENT NUMBER: 124:56360
TITLE: preparation of new retinol (vitamin A) derivatives and their use in pharmaceuticals and cosmetics
INVENTOR(S): Weischer, Carl Heinrich; Oestreich, Wolfgang
PATENT ASSIGNEE(S): Germany

SOURCE: Ger. Offen., 9 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4415204	A1	19951102	DE 1994-4415204	19940430 <--
PRIORITY APPLN. INFO.:			DE 1994-4415204	19940430

OTHER SOURCE(S): CASREACT 124:56360
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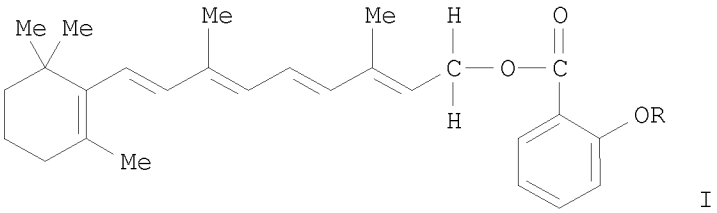

I

AB Preparation of retinol esters (I; R = H, Ac) of salicylic and acetylsalicylic acids and their use in pharmaceuticals and cosmetics are described. Pharmaceutical applications claimed include antiinflammatories, geriatric disorders, dermatol., cytoprotectives, antineuralgics, antitumor agents, antithrombotics, antidegenerative action. As therapeutics and cosmetics, I can be used for prophylaxis or treatment of inflammation and other skin and appendage disorders, such as, sunburn, vesicular pityriasis, dandruff, seborrhea, eczema, and pyoderma of the scalp, seborrheic eczema of the hair bed, seborrheic companion symptoms of androgenetic alopecia and other skin diseases including neurodermitis, psoriasis, hyperkeratosia, urticaria, and of the hair follicles. I can be used in therapy for night blindness, necrosia, intoxication, tumor sicknesses (e.g. bronchial carcinoma), neuralgia, old age problems, vitamin A deficiency diseases, and as prophylaxis for thrombosis.

L42 ANSWER 34 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:708324 CAPLUS
DOCUMENT NUMBER: 121:308324
TITLE: Antibody-drug conjugates for parenteral administration
INVENTOR(S): Barton, Russell Lavern; Guttman-Carlisle, Deborah Lane; Koppel, Gary Allen
PATENT ASSIGNEE(S): Eli Lilly and Co., USA
SOURCE: Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 620011	A1	19941019	EP 1994-302059	19940322 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
US 5556623	A	19960917	US 1993-40323	19930330 <--

CA 2119733	A1	19941001	CA 1994-2119733		19940322 <--
JP 06321880	A	19941122	JP 1994-57065		19940328 <--
US 5643573	A	19970701	US 1995-541847		19951010 <--
US 5665358	A	19970909	US 1996-649568		19960517 <--
PRIORITY APPLN. INFO.:			US 1993-40323	A	19930330
			US 1995-541847	A3	19951010

OTHER SOURCE(S): MARPAT 121:308324

AB Immunoconjugates of antibodies or antigen-recognizing fragments of antibodies and monovalent cytotoxic drug derivs. make use of β-alanine derived linkers, wherein the antibody or fragment thereof is attached to the linker's carboxy group via an ester or amide group and the drug is attached through the linker's 2-position methylene group. Intermediates, compns. and methods of use also are provided. For example, MeCOC(:CHOEt)CONHCH2CH2CO2H was prepared and reacted with desacetylvinblastine hydrazide sulfate, then with antibody VX 007B to give a conjugate. An anticancer activity of the conjugate was tested in vivo against xenografts of UCLA/P3 lung adenocarcinoma in mice.

L42 ANSWER 35 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:676197 CAPLUS

DOCUMENT NUMBER: 121:276197

TITLE: Thin-film hydrophilic polar multi-functionalized polymer (HPMP) matrix systems and methods for constructing and displaying ligands

INVENTOR(S): Hudson, Derek; Johnson, Charles R.; Ross, Michael J.; Shoemaker, Kevin R.; Cass, Robert T.; Giebel, Lutz B.; Zhou, Peng

PATENT ASSIGNEE(S): Arris Pharmaceutical Corp., USA

SOURCE: PCT Int. Appl., 59 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9419694	A1	19940901	WO 1994-US2036		19940218 <--
W: AU, CA, CN, JP, NO, US					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
US 5576220	A	19961119	US 1993-19725		19930219 <--
US 5585275	A	19961217	US 1993-79741		19930618 <--
WO 9405394	A1	19940317	WO 1993-US8267		19930902 <--
W: AU, CA, JP, NO					
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
AU 9463939	A	19940914	AU 1994-63939		19940218 <--
JP 08507602	T	19960813	JP 1994-519285		19940218 <--
PRIORITY APPLN. INFO.:			US 1993-19725	A	19930219
			US 1993-79741	A	19930618
			WO 1993-US8267	A	19930902
			US 1992-939065	A2	19920902
			WO 1994-US2036	W	19940218

AB Methods and systems of unhindered construction and display of tethered organic ligand mols. are disclosed, especially preparation and use of thin film, substantially non-crosslinked hydrophilic polar multi-functionalized polymers (HPMPs) anchored to a variety of functionalized substrates so that the HPMP forms a thin film matrix layer providing a unique, highly hydrated, high dielec. environment equivalent to an aqueous solution, for affinity

binding of ligands to tagged target mols. Preparation of e.g. a HPMP (dextranized) polyethylene substrate surface is described, as is e.g. production of dextrans containing masking functional groups. In a test of stability to TFA of the product of the invention as compared to a epichlorohydrin-bonded dextran-polyethylene, after only 2 h, approx. 90% of dextrans were lost from the epichlorohydrin-bonded surfaces, whereas only minor loss (<10%) was detected from the surface stapled according to the invention. Use of the The HPMP for peptide synthesis and peptide library screening is also described.

L42 ANSWER 36 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:625779 CAPLUS
DOCUMENT NUMBER: 119:225779
TITLE: Design and synthesis of novel ligands for the 5-HT3 and the 5-HT4 receptor
AUTHOR(S): Blum, E.; Buchheit, K. H.; Buescher, H. H.; Gamse, R.; Kloeppner, E.; Meigel, H.; Papageorgiou, C.; Waelchli, R.; Revesz, L.
CORPORATE SOURCE: Preclin. Res., Sandoz Pharma AG, Basel, CH-4002, Switz.
SOURCE: Bioorganic & Medicinal Chemistry Letters (1992), 2(5), 461-6
CODEN: BMCLE8; ISSN: 0960-894X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 119:225779
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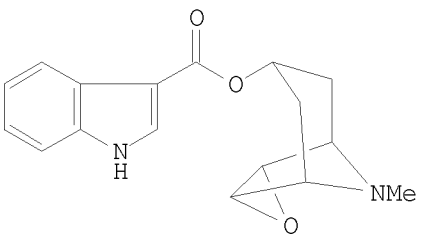

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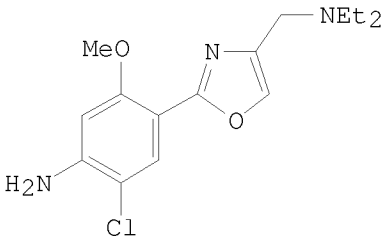

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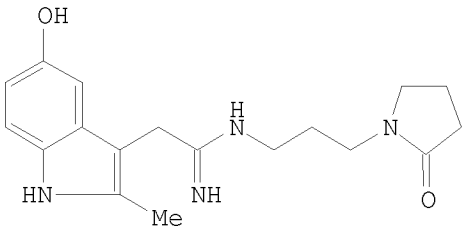

III

AB A novel highly potent 5-HT3 antagonist and Tropisetron analog I is described with an increased efficacy to inhibit cisplatin induced emesis in ferrets. Four novel structural classes of gastroprokinetic benzamide bioisosteres, e.g., II, are presented. 5-HT derivs., e.g., III, are described as ligands of the recently discovered 5-HT4 receptor.

L42 ANSWER 37 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:123815 CAPLUS
DOCUMENT NUMBER: 116:123815
TITLE: A polyclonal antibody preparation with Michaelian catalytic properties
AUTHOR(S): Gallacher, Gerard; Jackson, Caroline S.; Searcey, Mark; Badman, Geoffrey T.; Goel, Rajiv; Topham, Christopher M.; Mellor, Geoffrey W.; Brocklehurst, Keith
CORPORATE SOURCE: Queen Mary and Westfield Coll., Univ. London, London, E1 4NS, UK
SOURCE: Biochemical Journal (1991), 279(3), 871-81
CODEN: BIJOAK; ISSN: 0306-3275
DOCUMENT TYPE: Journal
LANGUAGE: English

AB 4-Nitrophenyl 4'-(3-aza-2-oxoheptyl)phenyl carbonate (I), an amide conjugate (II) involving the carboxy group of 4-nitrophenyl 4'-carboxymethylphenyl phosphate and an amino group of keyhole-limpet hemocyanin, and a fluorescein derivative (III) were synthesized. II was used as an immunogen with which to raise polyclonal antibodies in multigeneration cross-bred sheep; III was used for the initial assessment of the antisera via binding assays monitored by fluorescence polarization; I was used as a chromogenic substrate for the investigation of catalytic activity. The IgG from the antiserum of sheep number 270 was isolated by Na2SO4 precipitation and chromatog. on Protein G-Sepharose. This preparation of IgG catalyzed the hydrolysis of I; the catalysis at pH 8.0 and 25° obeyed Michaelis-Menten kinetics with at least 25 turnovers, Km = 3.34 μM, and lower limits for kcat of 0.029 s-1 and for kcat/Km of 8.77 × 103 M-1·s-1, on the unlikely assumption that the concentration of catalytic antibody is provided by twice the total IgG concentration (two sites per mol.); probable ests. of the fraction of the total IgG that is anti-haptenic IgG and of the fraction of this that is catalytically active suggest that the values of kcat/Km are actually very much larger than these lower limits. The failure of the antibody preparation to catalyze the hydrolysis of the isomeric 2-nitrophenyl carbonate (IV) which differs from I only in the position of the nitro substituent in the leaving group, compels the view that catalytic activity is due to antibody rather than contaminant enzyme; this conclusion is supported by (a) the failure of the following to discriminate effectively between the isomeric substrates I and IV: pig liver carboxylesterase, rabbit liver carboxylesterase (collectively EC 3.1.1.1), whole serum from a non-immunized sheep and whole serum from a sheep immunized with a derivative of 3-O-methylnoradrenaline and (b) the lack of catalytic activity in IgG prepns. from sheep immunized with sulfoxide or sulfone analogs of immunogen II. The various parameters used for the comparison of the kinetic characteristics of hydrolytic catalytic antibodies are discussed. The characteristics of hydrolysis of I catalyzed by the present polyclonal antibody preparation are shown to be substantially better in most respects than those of analogous reactions of two other carbonate esters catalyzed by monoclonal antibodies.

L42 ANSWER 38 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:115144 CAPLUS
DOCUMENT NUMBER: 110:115144
TITLE: Derivatives of all-trans- and 13-cis-retinoic acid and their preparation
INVENTOR(S): Deluca, Hector F.; Kutner, Andrzej; Schnoes, Heinrich K.
PATENT ASSIGNEE(S): Wisconsin Alumni Research Foundation, USA
SOURCE: PCT Int. Appl., 13 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8707604	A1	19871217	WO 1987-US1276	19870601 <--
W: CH, DE, GB, JP				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
US 4757140	A	19880712	US 1986-869791	19860602 <--
EP 271552	A1	19880622	EP 1987-904165	19870601 <--
EP 271552	B1	19931027		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 01500190	T	19890126	JP 1987-503792	19870601 <--
JP 06051716	B	19940706		
AT 96432	T	19931115	AT 1987-904165	19870601 <--
CA 1305136	C	19920714	CA 1987-538880	19870604 <--
US 4841038	A	19890620	US 1988-190443	19880505 <--
US 4966965	A	19901030	US 1989-327540	19890323 <--

PRIORITY APPLN. INFO.:
US 1986-869791 A 19860602
EP 1987-904165 A 19870601
WO 1987-US1276 W 19870601
US 1988-190443 A3 19880505

OTHER SOURCE(S): CASREACT 110:115144
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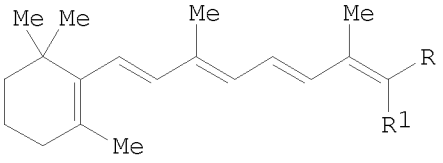


I

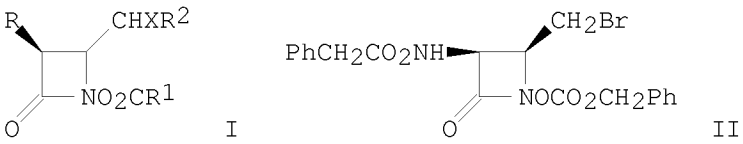
AB all-trans- And 13-cis-retinoic acid (I; R = CO2H, R1 = H; R = H, R1 = CO2H, resp.) derivs. are prepared all-trans-I (R = CO2H, R1 = H) (III) was stirred with an equimolar mixture of N-hydroxysuccinimide and DCC in dioxane at room temperature to give III succinimido ester, which was treated with a solution of CoA in THF at pH 8.0-8.5 at 35° under N to give III CoA ester.

L42 ANSWER 39 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:406321 CAPLUS
DOCUMENT NUMBER: 109:6321
TITLE: Preparation of haloalkylazetidinones
INVENTOR(S): Miller, Marvin Joseph
PATENT ASSIGNEE(S): University of Notre Dame, USA
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

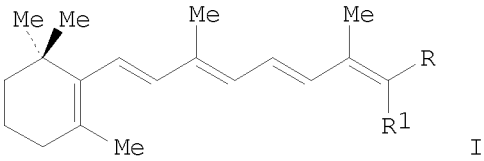
EP 256763	A1	19880224	EP 1987-306916		19870805 <--
EP 256763	B1	19931208			
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE					
US 4751296	A	19880614	US 1986-893748		19860806 <--
IL 83420	A	19920715	IL 1987-83420		19870803 <--
JP 63044560	A	19880225	JP 1987-196152		19870805 <--
JP 07080839	B	19950830			
HU 45011	A2	19880530	HU 1987-3580		19870805 <--
HU 201737	B	19901228			
CA 1282066	C	19910326	CA 1987-543734		19870805 <--
AT 98229	T	19931215	AT 1987-306916		19870805 <--
PRIORITY APPLN. INFO.:			US 1986-893748	A	19860806
			EP 1987-306916	A	19870805

OTHER SOURCE(S): CASREACT 109:6321; MARPAT 109:6321
GI



AB The title compds. [I; R = protected NH2, alkyl, phenylalkyl; R1 = alkyl, alkoxy, (un)substituted Ph, PhO, PhCH2O; R2 = H, alkyl, CH:CHR3, (CH2)mCHO, (CH2)nOR4 (CH2)p X1, (CH2)qCO2R5; R3 = H, alkyl, CO2R5, Ph, alkoxyphenyl, furyl; R4 = hydroxy protective group; R5 = carboxy protective group; X, X1 = Cl, Br, iodo; m, n, p, q = 0-2] were prepared by reaction of R2CH:CHCHRCONHOCOR1 with a weak base in the presence of a pos. halogen reagent. MeSOCH2CH2CH(NHCO2CH2Ph)CO2Me (preparation given) was stirred vigorously at 180-190° for 1.5-2 h to give, after ester hydrolysis, H2C:CHCH(NHCO2CH2Ph)CO2H which was esterified with N-hydroxysuccinimide and the product amidated with HONH2·HCl. The N-hydroxyamide thus obtained was condensed with ClCO2CH2Ph to give H2C:CHCH(NHCO2CH2Ph)CONHOCO2CH2Ph which, in MeCN, was stirred with K2CO3 followed by addition of H2O and then Br to give azetidinone II.

L42 ANSWER 40 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:22078 CAPLUS
DOCUMENT NUMBER: 108:22078
TITLE: Synthesis of coenzyme A ester of retinoic acid: intermediate in vitamin A metabolism
AUTHOR(S): Kutner, Andrzej; Renstrom, Britta; Schnoes, Heinrich K.; DeLuca, Hector F.
CORPORATE SOURCE: Coll. Agric. Life Sci., Univ. Wisconsin, Madison, WI, 53706, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1986), 83(18), 6781-4
CODEN: PNASA6; ISSN: 0027-8424
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB CoA esters of all-trans-I (R = CO2H; R1 = H) and 13-cis-retinoic acid I (R = H; R1 = CO2H) were prepared for use in studying vitamin A metabolism, from I (R,R1 = H, CO2H) via their activated succinimido esters or anhydrides.

L42 ANSWER 41 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1987:598057 CAPLUS
DOCUMENT NUMBER: 107:198057
TITLE: Synthesis and immobilization of a novel acridine derivative on microparticulate silica. A study of its interactions with single-stranded oligonucleotides by high-performance liquid chromatography
AUTHOR(S): Bischoff, Rainer; Regnier, Fred E.
CORPORATE SOURCE: Dep. Biochem., Purdue Univ., West Lafayette, IN, 47907, USA
SOURCE: Journal of Chromatography (1987), 397, 13-24
CODEN: JOCRAM; ISSN: 0021-9673
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A novel approach for immobilizing acridine on 5-μm silica gel is described. The acridine moiety is functionalized with a carboxylic acid group at its reactive 9-position and activated, leading to 9-acridinylpropionic acid N-hydroxysuccinimide ester. This derivative is efficiently bound to the silica matrix through a primary aliphatic amine group at the end of a 15-atom spacer arm. The chromatog. properties of the final stationary phases, as evaluated with d(T)10 and d(A)10 at various pH values and organic solvent concns., resemble those of hydrophobic weak anion exchangers. When a secondary amine group is placed closed to the acridine moiety in 1 of the packings, enhanced binding of the oligodeoxyribonucleotides is observed that goes beyond a purely additive effect.

L42 ANSWER 42 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1987:67117 CAPLUS
DOCUMENT NUMBER: 106:67117
TITLE: Compounds for site-enhanced delivery of radionuclides and their uses
INVENTOR(S): Bodor, Nicholas S.
PATENT ASSIGNEE(S): University of Florida, USA
SOURCE: PCT Int. Appl., 262 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8600898	A1	19860213	WO 1985-US1334	19850715 <--
W: AU, DK, FI, NO, US				
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				

AU 8546358	A	19860225	AU 1985-46358	19850715 <--
EP 187832	A1	19860723	EP 1985-903633	19850715 <--
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
JP 61106556	A	19860524	JP 1985-160040	19850719 <--
ZA 8505476	A	19870325	ZA 1985-5476	19850719 <--
CA 1267899	A1	19900417	CA 1985-487165	19850719 <--
ES 552072	A1	19870416	ES 1986-552072	19860217 <--
NO 8600981	A	19860520	NO 1986-981	19860314 <--
FI 8601118	A	19860318	FI 1986-1118	19860318 <--
DK 8601247	A	19860520	DK 1986-1247	19860318 <--
US 4963688	A	19901016	US 1987-88523	19870821 <--
US 5155227	A	19921013	US 1990-561920	19900802 <--

PRIORITY APPLN. INFO.:

US 1984-632314	A2	19840719
WO 1985-US1334	A	19850715
US 1986-879120	B1	19860319
US 1987-88523	A3	19870821

OTHER SOURCE(S): MARPAT 106:67117

GI For diagram(s), see printed CA Issue.

AB A composition of matter comprised: (1) the residue of a chelating agent having ≥1 reactive functional group selected from NH2, CO2H, OH, amide, and imide, said functional group being not essential for the complexing properties of the chelating agent, said residue being characterized by the absence of a H atom from ≥1 of said reactive functional groups of said chelating agent which is either (a) capable of chelating with a metallic radionuclide or (b) chelated with a metallic radionuclide; and (2) a dihydropyridine/pyridinium salt redox carrier moiety; said chelating agent residue and said carrier moiety being coupled to each other to form a hydrolytically cleavable linkage between them. More specifically, a salt I (A = residue of chelating agent capable of chelating with a metal radionuclide; y = 1,2; [QC+] is the hydrophilic, ionic pyridinium salt form of a dihydropyridine/pyridinium salt redox carrier; X- = anion of a pharmaceutically acceptable organic or inorg. acid; n = valence of acid anion; m = number which when multiplied by n = y. This complex provides a new radionuclide pharmaceutical that, in its lipoidal dihydropyridine form, penetrates the blood-brain barrier and allows increased levels of radionuclide concentration in the brain. This radionuclide delivery system is well suited for use in scintigraphy and similar radiog. techniques. Homocysteine thiolactone II in THF reacted with (H2NCH2)2 to give H2NCH2CH2NHCOCH(CH2CH2SH)NHCOCH2N(CO2CMe3)CH2CH2SH (III). Esterification of nicotinic acid with N-hydroxysuccinimide gave the succinimidyl ester, which was quaternized with MeI to give succinimidyl trigonellinate (IV). Amidation of IV with III gave homocysteinamide V (R = CO2CMe3), deblocking of which with HCl(g) in EtOH gave V (R = H). This in EtOH containing NaOH was treated with 99mTcO4- and Na2S2O4 solution to give the complex between dihydropyridine VI and the oxotechnetate-99m ion.

L42 ANSWER 43 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	1984:570730 CAPLUS
DOCUMENT NUMBER:	101:170730
ORIGINAL REFERENCE NO.:	101:25811a,25814a
TITLE:	Nitroaliphatic compounds and their use
INVENTOR(S):	Okamoto, Masanori; Iwami, Morita; Takase, Shigehiro; Uchida, Itsuo; Umehara, Kazuyoshi; Kohsaka, Masanobu; Imanaka, Hiroshi
PATENT ASSIGNEE(S):	Fujisawa Pharmaceutical Co., Ltd. , Japan
SOURCE:	Eur. Pat. Appl., 58 pp. CODEN: EPXXDW
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 113106	A1	19840711	EP 1983-112955	19831222 <--
EP 113106	B1	19860514		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
ZA 8308831	A	19840725	ZA 1983-8831	19831125 <--
AU 8321744	A	19840705	AU 1983-21744	19831128 <--
AU 560980	B2	19870430		
US 4767768	A	19880830	US 1983-559260	19831208 <--
CA 1231949	A1	19880126	CA 1983-443153	19831213 <--
FI 8304702	A	19840701	FI 1983-4702	19831221 <--
FI 78904	B	19890630		
FI 78904	C	19891010		
AT 19773	T	19860515	AT 1983-112955	19831222 <--
JP 59152366	A	19840831	JP 1983-252520	19831227 <--
JP 02019822	B	19900507		
DK 8306077	A	19840701	DK 1983-6077	19831230 <--
NO 8304884	A	19840702	NO 1983-4884	19831230 <--
NO 158379	B	19880524		
NO 158379	C	19880831		
HU 32795	A2	19840928	HU 1983-4543	19831230 <--
HU 200747	B	19900828		
ES 528561	A1	19850501	ES 1983-528561	19831230 <--
SU 1389678	A3	19880415	SU 1983-3678551	19831230 <--
US 4778804	A	19881018	US 1985-786754	19851011 <--
US 4782088	A	19881101	US 1986-946868	19861229 <--
US 4863926	A	19890905	US 1987-119091	19871110 <--
JP 02160750	A	19900620	JP 1989-259680	19891004 <--
JP 04017944	B	19920326		

PRIORITY APPLN. INFO.:	GB 1982-37068	A	19821231
	US 1983-559260	A3	19831208
	EP 1983-112955	A	19831222
	US 1985-786754	A3	19851011

OTHER SOURCE(S): CASREACT 101:170730

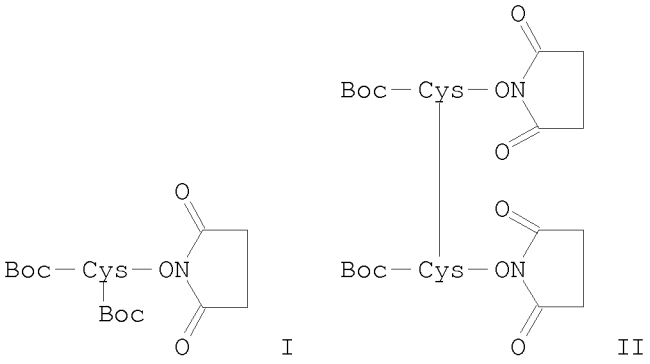
AB Nitrated oximes RCR1(NO2)CR2:CR3C(:NOR4)R5 and RCR1(NO2)CHR2CHR3C(:NOR4)R5 (R = H, alkyl, alkoxyphenyl; R1 = H, alkyl; R2 = alkyl; R3 = H, alkyl; R4 = H, alkyl, carboxyalkyl, carbalkoxyalkyl; R5 = H, CH:NOH, cyano, a N-piperazinecarbonyl group, alkanoyl, esterified CO2H, alkyl, CONH2, substituted carbamoyl), which were prepared, showed antiplatelet aggregation and vasodilator activity. Thus, (E,E)-MeCH:CEtCH:CHCONH2 was treated with NaNO2 at pH 3.0 to give (E)-MeCH(NO2)CEt:CHC(:NOH)CONH2, which also exhibited antihypertensive activity.

L42 ANSWER 44 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	1984:45461 CAPLUS
DOCUMENT NUMBER:	100:45461
ORIGINAL REFERENCE NO.:	100:6863a,6866a
TITLE:	A new enkephalin analog: trans-4-hydroxycinnamoyl-glycyl-glycyl-phenylalanyl-leucine. Synthesis and biological properties
AUTHOR(S):	Amar, Claudine; Vilkas, Erna; Laurent, Stephane; Gautray, Bruno; Schmitt, Henri
CORPORATE SOURCE:	Lab. Org. Biol. Chem., Univ. Paris-Sud, Orsay, Fr.
SOURCE: & Protein Research	International Journal of Peptide
	(1983), 22(4), 434-6
	CODEN: IJPPC3; ISSN: 0367-8377
DOCUMENT TYPE:	Journal

LANGUAGE: English
AB A leucine-enkephalin [58822-25-6] analog in which the N-terminal tyrosine has been replaced by trans-4-hydroxycinnamic acid was synthesized by liquid-phase coupling methods. The central cardiovascular effects of this analog were investigated and the results discussed.

L42 ANSWER 45 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1982:582827 CAPLUS
DOCUMENT NUMBER: 97:182827
ORIGINAL REFERENCE NO.: 97:30608h,30609a
TITLE: Grafting of cysteine and cystine to the surface of an aerosil across an amide bond
AUTHOR(S): Filippov, A. P.; Kozynchenko, A. P.
CORPORATE SOURCE: Inst. Fiz. Khim. im. Pisarzhevskogo, Kiev, USSR
SOURCE: Ukrainskii Khimicheskii Zhurnal (Russian Edition) (1982), 48(8), 860-3
CODEN: UKZHAU; ISSN: 0041-6045
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI



AB Cysteine I (Boc = Me3CO2C) and cystine II were grafted onto an aerosil by treating with aminoaerosil RSiMe2NH2.

L42 ANSWER 46 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1980:198783 CAPLUS
DOCUMENT NUMBER: 92:198783
ORIGINAL REFERENCE NO.: 92:32226h,32227a
TITLE: Glucosamine peptide derivatives and their pharmaceutical compositions
INVENTOR(S): Yuichi, Yamamura; Ichiro, Azuma; Shigeru, Kobayashi
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: Eur. Pat. Appl., 80 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 2677	A1	19790711	EP 1978-101524	19781202 <--
EP 2677	B1	19821013		

R: CH, DE, FR, GB, IT

JP 54079227	A	19790625	JP 1977-145415		19771202 <--
JP 54079228	A	19790625	JP 1977-145416		19771202 <--
JP 02033719	B	19900730			
JP 54120696	A	19790919	JP 1978-28012		19780310 <--
JP 63000446	B	19880107			
US 4430265	A	19840207	US 1982-393870		19820630 <--
PRIORITY APPLN. INFO.:			JP 1977-145415		19771202
			JP 1977-145416		19771202
			JP 1978-28012		19780310
			US 1978-962033	A1	19781120
			US 1981-249902	A1	19810401

OTHER SOURCE(S): MARPAT 92:198783
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Acetylmuramyl dipeptide derivs. I [n = O, R = H, alkyl; n = 1-9, R = H, NH2; R1 and R2 = alkyl; R3 and R4 = H, alkyl, CH2OH; R5 and R6 = CO2H, CONH2; R7 = H, R8CO (R8 = acyclic hydrocarbon which can be ω-substituted by cycloalkyl), Q (l = 1-9; m = 0-9; t = 2-100; R8 and R9 = H, alkyl; R10 = alkyl, CO2H which can be esterified, OH which can be etherified, pyrrolidino which can be substituted)] were prepared as immunostimulants. Thus, acetylmuramyl dipeptide II (R11 = H) was esterified with Z-β-Ala-OC6H4NO2-p (Z = PhCH2O2C) to give II (R11 = Z-β-Ala), which was hydrogenated over Pd/C to give β-alanylmuramic acid derivative III (R12 = H) (IV). IV was N-acylated with CH2:CMeCO2Su (Su = succinimido) to give III (R12 = CH2:CMeCO) (V), which was polymerized to give the homopolymer of V. V was copolymd. with N-vinyl-2-pyrrolidone, stearyl vinyl ether, and tridecyl methacrylate to give the resp. copolymers. The cell-mediated immunostimulatory activities of several I were tested.

L42 ANSWER 47 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1979:474325 CAPLUS
DOCUMENT NUMBER: 91:74325
ORIGINAL REFERENCE NO.: 91:12008h,12009a
TITLE: Alkylaniline compounds and an antiatherosclerosis agent containing it
PATENT ASSIGNEE(S): American Cyanamid Co., USA
SOURCE: Ger. Offen., 263 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2841707	A1	19790427	DE 1978-2841707	19780925 <--
US 4117158	A	19780926	US 1977-836946	19770927 <--
ZA 7805071	A	19791128	ZA 1978-5071	19780906 <--
BE 870687	A1	19791128	BE 1978-190650	19780922 <--
US 4254138	A	19810303	US 1979-87137	19791022 <--
US 4272546	A	19810609	US 1979-87136	19791022 <--
DK 7904815	A	19800516	DK 1979-4815	19791114 <--
SE 7909398	A	19800516	SE 1979-9398	19791114 <--

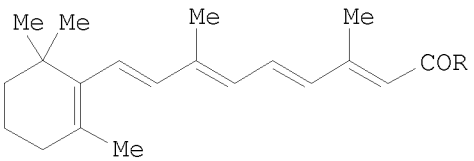
ES 485942	A1	19801101	ES 1979-485942		19791114 <--
US 4309553	A	19820105	US 1980-156144		19800603 <--
PRIORITY APPLN. INFO.:			US 1977-836946	A	19770927
			US 1977-836947	A	19770927
			US 1977-861736	A3	19771219
			GB 1978-44562	A	19781115

AB More than 100 4-RR1NC6H4R2 (I; R = C8-19-alkyl; R1 = H or a group convertible in vivo to H, e.g., Me, MeCO, CH2SO3Na; R2 = alkoxycarbonyl, substituted carbamoyl or carboximidoyl, alkoxyalkyl, acyl, cyanoalkyl, etc.), useful in the treatment or prevention of atherosclerosis (no data), were prepared Thus, 4-O2NC6H4SO2NH2 was treated with NaH, and the 4-O2NC6H4SO2NHNa treated with 4-Me(CH2)15NHC6H4COCl (prepared from the acid) to give I (R = H, R1 = hexadecyl, R2 = 4-O2NC6H4SO2NH).

L42 ANSWER 48 OF 48 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1978:89892 CAPLUS
DOCUMENT NUMBER: 88:89892
ORIGINAL REFERENCE NO.: 88:14095a,14098a
TITLE: All-trans-retinoic acid esters and amides
INVENTOR(S): Gander, R. J.; Gurney, J. A.
PATENT ASSIGNEE(S): Johnson and Johnson, USA
SOURCE: Belg., 20 pp.
CODEN: BEXXAL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
BE 847942	A1	19770503	BE 1976-172046		19761103 <--
US 4108880	A	19780822	US 1975-628177		19751103 <--
CA 1062700	A1	19790918	CA 1976-264672		19761102 <--
NL 7612201	A	19770505	NL 1976-12201		19761103 <--
GB 1543824	A	19790411	GB 1976-45746		19761103 <--
US 4190594	A	19800226	US 1978-906168		19780515 <--
PRIORITY APPLN. INFO.:			US 1975-628177	A	19751103

GI



I

AB All-trans-retinoic acid derivs. I [R = 2-cyclohexylethoxy, MeO2C(CH2)10O, HO(CH2)4O, cholesteryl, 3-CH2:CHC6H4CH2O, 4-CH2:CHC6H4CH2O, 4-BrC6H4CH2O, OCH2COR1, NHPr, NHCMe3, NHCMe2CH2CMe3, morpholino, 4-HOC6H4NH, 4,2-MeO2C(HO)C6H3NH, 3,4-(MeO)2C6H3CH2CH2NH, 2-benzothiazolylamino, 1-imidazolyl, 2-nicotinoylhydrazino, 1-benzotriazolyl, 1,2,4-triazol-1-yl, β-ionone hydrazono N-cyclohexylaminocarbonyl-N-cyclohexylamino; R1 = cholesteryloxy, Ph, 4-BrC6H4, 4-MeOC6H4, 4-O2NC6H4, 4-HOC6H4, 4-MeC6H4, 4-NCC6H4, 4-EtOC6H4, 4-AcOC6H4, 2-naphthyl, 4-PhC6H4, 2,5-(MeO)2C6H3, 2,4-Cl2C6H3, 2,4-Me2C6H3, 3,4-(AcO)2C6H3, 3,4,5-(MeO)3C6H2, 2,4,6-Me3C6H2]

were prepared for use as sunscreen agents (no data). Thus K all-trans-retinoate was treated with Br(CH2)10CO2Me to give I [R = O(CH2)10CO2Me].

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FULL ESTIMATED COST                                     169.52     267.62

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
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FULL ESTIMATED COST                                     169.52     267.62

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STN Search - 10/517,692

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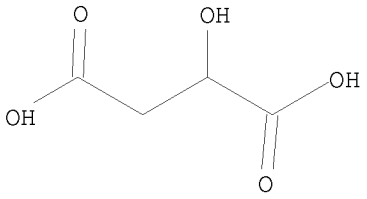

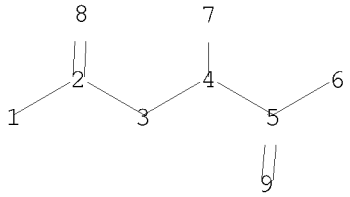

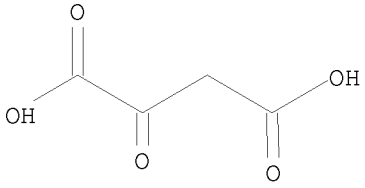

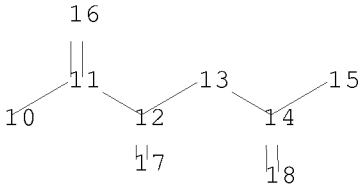

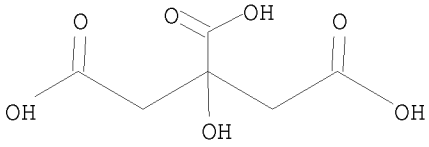

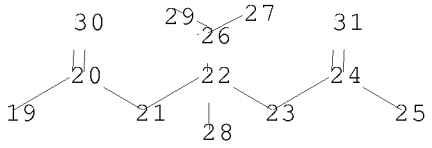

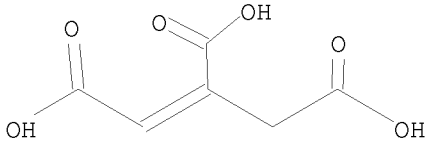

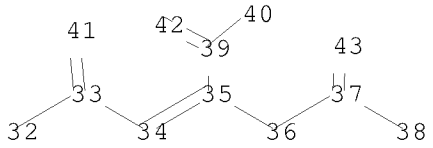

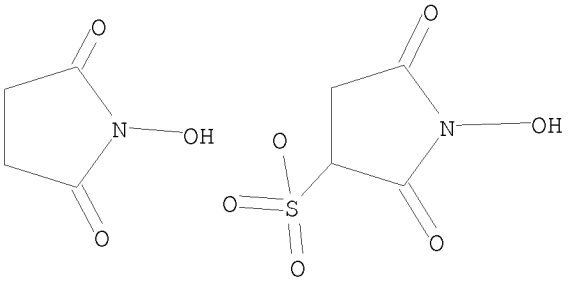

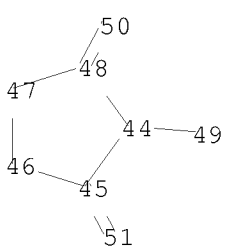

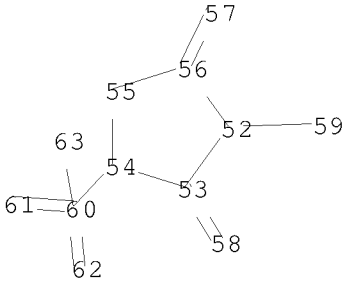

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50 51 57 58 59 60 61 62 63
ring nodes :
44 45 46 47 48 52 53 54 55 56
chain bonds :
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14-15 14-18 19-20 20-21 20-30 21-22 22-23 22-26 22-28 23-24 24-25 24-31
26-27 26-29 32-33 33-34 33-41 34-35 35-36 35-39 36-37 37-38 37-43 39-40
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ring bonds :
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exact/norm bonds :
4-7  12-17  22-28  44-45  44-48  44-49  45-46  45-51  46-47  47-48  48-50  52-53
52-56  52-59  53-54  53-58  54-55  54-60  55-56  56-57  60-61  60-62  60-63
exact bonds :
2-3  3-4  4-5  11-12  12-13  13-14  20-21  21-22  22-23  22-26  23-24  33-34  34-35
 35-36  35-39  36-37
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59:CLASS  60:CLASS  61:CLASS  62:CLASS  63:CLASS



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L43             STR
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.


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Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.




SAMPLE SEARCH INITIATED 09:49:10 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -        1 TO ITERATE

100.0% PROCESSED        1 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:            1 TO       80
PROJECTED ANSWERS:               0 TO        0

L44           0 SEA SSS SAM L43
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STN Search - 10/517,692

L45 0 L44

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COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 0.48 269.04

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY TOTAL SESSION
CA SUBSCRIBER PRICE 0.00 -44.80

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FILE 'CAPLUS' ENTERED AT 11:02:05 ON 31 JAN 2008
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COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 0.48 269.04

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY TOTAL SESSION
CA SUBSCRIBER PRICE 0.00 -44.80

=> fil caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 0.48 269.04

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY TOTAL SESSION
CA SUBSCRIBER PRICE 0.00 -44.80

FILE 'CAPLUS' ENTERED AT 11:02:13 ON 31 JAN 2008
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FILE COVERS 1907 - 31 Jan 2008 VOL 148 ISS 5
FILE LAST UPDATED: 30 Jan 2008 (20080130/ED)


```
=> s crosslinking agent
        209268 CROSSLINKING
           136 CROSSLINKINGS
        209328 CROSSLINKING
                  (CROSSLINKING OR CROSSLINKINGS)
        884233 AGENT
       1302570 AGENTS
       1822121 AGENT
                  (AGENT OR AGENTS)
L46      72274 CROSSLINKING AGENT
                  (CROSSLINKING(W)AGENT)

=> s sulfate
        546575 SULFATE
         99691 SULFATES
L47     595653 SULFATE
                  (SULFATE OR SULFATES)

=> s l46 and l47
L48       2066 L46 AND L47

=> s chrondroitin sulfate
            10 CHRONDROITIN
        546575 SULFATE
         99691 SULFATES
        595653 SULFATE
                  (SULFATE OR SULFATES)
L49          8 CHRONDROITIN SULFATE
                  (CHRONDROITIN(W)SULFATE)

=> s (chondroitin sulfate OR "Chondroitin, hydrogen sulfate")
         16310 CHONDROITIN
           100 CHONDROITINS
         16325 CHONDROITIN
                  (CHONDROITIN OR CHONDROITINS)
        546575 SULFATE
         99691 SULFATES
        595653 SULFATE
                  (SULFATE OR SULFATES)
         13463 CHONDROITIN SULFATE
                  (CHONDROITIN(W)SULFATE)
         16310 "CHONDROITIN"
           100 "CHONDROITINS"
         16325 "CHONDROITIN"
                  ("CHONDROITIN" OR "CHONDROITINS")
       1039920 "HYDROGEN"
          6143 "HYDROGENS"
       1043336 "HYDROGEN"
                  ("HYDROGEN" OR "HYDROGENS")
        546575 "SULFATE"
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         99691 "SULFATES"
        595653 "SULFATE"
                 ("SULFATE" OR "SULFATES")
            52 "CHONDROITIN, HYDROGEN SULFATE"
                 ("CHONDROITIN"(W)"HYDROGEN"(W)"SULFATE")
L50      13474 (CHONDROITIN SULFATE OR "CHONDROITIN, HYDROGEN SULFATE")

=> s l46 and l50
L51        116 L46 AND L50

=> s l51 and biomaterial
         10076 BIOMATERIAL
         10856 BIOMATERIALS
         16264 BIOMATERIAL
                 (BIOMATERIAL OR BIOMATERIALS)
L52          8 L51 AND BIOMATERIAL

=> d ibib abs 1-8

L52  ANSWER 1 OF 8  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:        2006:234728  CAPLUS
DOCUMENT NUMBER:         144:299306
TITLE:                   Process for isolating biomaterial from tissue and an
                         isolated biomaterial extract prepared therefrom
INVENTOR(S):             Ying, Jackie Y.; Pek, Shona
PATENT ASSIGNEE(S):      Agency for Science, Technology and Research, Singapore
SOURCE:                  PCT Int. Appl., 20 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     WO 2006028415         A1    20060316    WO 2004-SG289           20040909
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI,
             CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS,
             MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
     AU 2004323001         A1    20060316    AU 2004-323001          20040909
     EP 1786829            A1    20070523    EP 2004-775611          20040909
         R:  DE, FR, GB
PRIORITY APPLN. INFO.:                       WO 2004-SG289       A   20040909
AB   A process for isolating a biomaterial extract from tissue is disclosed.
     The process comprises the step of contacting the tissue with an extracting
     solution so as to extract a biomaterial into solution  A solution containing
the
     biomaterial extract is separated before being freeze-dried at a rate sufficient
     to enable the biomaterial to be isolated.  The examples relate to the
     extraction of collagen from skin or hide using an acetic acid solution as the
     solvent.  The product obtained may be used in cosmetic, medical,
     pharmaceutical, food, or veterinarian industries.
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REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:346799 CAPLUS
DOCUMENT NUMBER: 142:397837
TITLE: Protein biomaterials and biocoacervate
INVENTOR(S): Masters, David B.; Berg, Eric P.
PATENT ASSIGNEE(S): Gel-Del Technologies, Inc., USA
SOURCE: PCT Int. Appl., 99 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005034852	A2	20050421	WO 2004-US27975	20040826
WO 2005034852	A3	20071213		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, AP, EA, EP, OA				
AU 2004279349	A1	20050421	AU 2004-279349	20040826
CA 2537315	A1	20050421	CA 2004-2537315	20040826
US 2006073207	A1	20060406	US 2004-929117	20040826
EP 1660013	A2	20060531	EP 2004-782454	20040826
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				

PRIORITY APPLN. INFO.: US 2003-497824P P 20030826
WO 2004-US27975 W 20040826

AB The present invention relates to protein biocoacervates and biomaterials and the methods of making and using protein biocoacervates and biomaterials. More specifically the present invention relates to protein biocoacervates and biomaterials that may be utilized for various medical applications including, but not limited to, drug delivery devices for the controlled release of pharmacol. active agents, coated medical devices (e.g., stents, valves), vessels, tubular grafts, vascular grafts, wound healing devices including protein suture biomaterials and biomeshes, dental plugs and implants, skin/bone/tissue grafts, tissue fillers, protein biomaterial adhesion prevention barriers, cell scaffolding and other biocompatible biocoacervate or biomaterial devices. Soluble bovine collagen was dissolved in water. To this solution was added elastin and sodium heparinate dissolved in water. The elastin/heparin solution was added quickly to the collagen solution with minimal stirring thereby immediately producing an amorphous coacervate precipitate

L52 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:857457 CAPLUS
DOCUMENT NUMBER: 141:337851
TITLE: Molded elastin article and process for producing the

same
INVENTOR(S): Miyamoto, Keiichi; Kitazono, Eiichi; Miyoshi, Takanori; Kaneko, Hiroaki; Sumi, Yoshihiko; Hirata, Hitoshi
PATENT ASSIGNEE(S): Teijin Limited, Japan
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087232	A1	20041014	WO 2004-JP4494	20040330
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004226551	A1	20041014	AU 2004-226551	20040330
CA 2520704	A1	20041014	CA 2004-2520704	20040330
EP 1609492	A1	20051228	EP 2004-724354	20040330
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
CN 1767864	A	20060503	CN 2004-80008680	20040330
US 2006194036	A1	20060831	US 2005-551545	20050930

PRIORITY APPLN. INFO.: JP 2003-94398 A 20030331
WO 2004-JP4494 A 20040330
OTHER SOURCE(S): MARPAT 141:337851

AB Disclosed is a molded elastin article in which a fiber structure made of aliphatic polyester fibers having an average fiber diameter of 0.05 to 50 μm are employed as a supporting base and which is flexible, bioabsorbable and has such tear strength as allowing stitching in practice. This molded elastin article is useful as a material for tubes and artificial vessels to be used in transplantation in vivo which are bioabsorbable and have such tear strength and flexibility as withstanding stitching during surgery operations. A tube made with polylactic acid (Lacty 9031) was reacted with elastin and a water-soluble crosslinking agent prepared from dodecanediarboxylic acid and 4-hydroxyphenyldimethyl sulfonium methylsulfate to obtain a elastin-crosslinked polyester tube.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:493623 CAPLUS
DOCUMENT NUMBER: 140:169587
TITLE: Preparation and evaluation of molecularly-defined collagen-elastin-glycosaminoglycan scaffolds for tissue engineering
AUTHOR(S): Daamen, W. F.; van Moerkerk, H. Th. B.; Hafmans, T.; Buttafoco, L.; Poot, A. A.; Veerkamp, J. H.; van Kuppevelt, T. H.

CORPORATE SOURCE: NCMLS, Department of Biochemistry 194, University Medical Centre Nijmegen, Nijmegen, 6500 HB, Neth.
SOURCE: Biomaterials (2003), 24(22), 4001-4009
CODEN: BIMADU; ISSN: 0142-9612
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Extracellular matrix components are valuable building blocks for the preparation of biomaterials involved in tissue engineering, especially if their biol., chemical and phys. characteristics can be controlled. In this study, isolated type I collagen fibrils, elastin fibers and chondroitin sulfate (CS) were used for the preparation of molecularly-defined collagen-elastin-glycosaminoglycan scaffolds. A total of 12 different scaffolds were prepared with four different ratios of collagen and elastin (1:9, 1:1, 9:1 and 1:0), with and without chemical crosslinking, and with and without CS. Collagen was essential to fabricate coherent, porous scaffolds. Electron microscopy showed that collagen and elastin phys. interacted with each other and that elastin fibers were enveloped by collagen. By carbodiimide-crosslinking, amine groups were coupled to carboxylic groups and CS could be incorporated. More CS could be bound to collagen scaffolds (10%) than to collagen-elastin scaffolds (2.4-8.5% depending on the ratio). The attachment of CS increased the water-binding capacity to up to 65%. Scaffolds with a higher collagen content had a higher tensile strength whereas addition of elastin increased elasticity. Scaffolds were cytocompatible as was established using human myoblast and fibroblast culture systems. It is concluded that molecularly-defined composite scaffolds can be composed from individual, purified, extracellular matrix components. Data are important in the design and application of tailor-made biomaterials for tissue engineering.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L52 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:503015 CAPLUS
DOCUMENT NUMBER: 127:113411
TITLE: Use of injectable or implantable biomaterials for filling or blocking lumens and voids of the body
INVENTOR(S): Rhee, Woonza M.; Berg, Richard A.; Chu, George H.; Delustro, Frank A.; Jolivette, Dan M.; Mccullough, Kimberly A.
PATENT ASSIGNEE(S): Collagen Corporation, USA
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9722372	A1	19970626	WO 1996-US20553	19961218
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2239772	A1	19970626	CA 1996-2239772	19961218
AU 9713473	A	19970714	AU 1997-13473	19961218
AU 708320	B2	19990729		
EP 876166	A1	19981111	EP 1996-945006	19961218
EP 876166	B1	20040818		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

JP 2000501975	T	20000222	JP 1997-523044	19961218
AT 273722	T	20040915	AT 1996-945006	19961218
ES 2227627	T3	20050401	ES 1996-945006	19961218
JP 2005320352	A	20051117	JP 2005-211983	20050721
PRIORITY APPLN. INFO.:			US 1995-574050 A	19951218
			JP 1997-523044 A3	19961218
			WO 1996-US20553 W	19961218

AB Methods for completely or partially blocking, augmenting, sealing, or filling various biol. lumens and voids within the body of a patient are disclosed. Lumens include arteries, veins, intestines, fallopian tubes, and trachea. Voids include various lesions, fissures, diverticulae, cysts, fistulae, aneurysms, or other undesirable voids that may exist within a patient's body. An effective amount of a biomaterial is administered (e.g., via injection, catheter, or surgical implantation) into the lumen or void. Thus, fibrillar collagen (65 mg/mL) was mixed with PEG succinimidyl glutarate (SG-PEG)in a 1-10 molar ratio of collagen-SG-PEG. The collagen/SG-pEG reaction mixture was extruded into small diameter tubings. The above collagen rod was inserted into each of the ureters of a guinea pig cadaver and cut to size. The crosslinked collagen rod was not dislodged and the bladder did not leak, as viewed under UV light.

L52 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:660894 CAPLUS
DOCUMENT NUMBER: 125:285011
TITLE: Use of hydrophobic crosslinking agents to prepare crosslinked biomaterial implants
INVENTOR(S): Rhee, Woonza M.
PATENT ASSIGNEE(S): Collagen Corporation, USA
SOURCE: Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 732109	A1	19960918	EP 1996-102366	19960216
R: AT, CH, DE, FR, GB, IT, LI, NL, SE				
CA 2165728	A1	19960915	CA 1995-2165728	19951220
JP 09249751	A	19970922	JP 1996-58138	19960314
US 6962979	B1	20051108	US 1999-344230	19990625
US 2004121951	A1	20040624	US 2003-448246	20030528
US 7129209	B2	20061031		
US 2005154125	A1	20050714	US 2004-997246	20041123
JP 2006181389	A	20060713	JP 2006-66762	20060310
PRIORITY APPLN. INFO.:			US 1995-403358 A	19950314
			JP 1996-58138 A3	19960314
			US 1997-987467 B1	19971209
			US 1999-344230 A1	19990625

AB Novel crosslinked biomaterial compns. are prepared using hydrophobic polymers as a crosslinking agent. Preferred hydrophobic polymers are those that contain two or more reactive succinimidyl groups, including disuccinimidyl suberate (I), bis(sulfosuccinimidyl) suberate, and dithiobis(succinimidyl propionate). Crosslinked biomaterial compns. prepared using mixts. of hydrophobic and hydrophilic crosslinking agents are also disclosed. The compns. of the present invention can be used to prepare formed implants for use in a variety of medical applications. Thus, 1.0 mL of 35 mg/mL collagen was mixed with 3 mg I in a syringe and

incubated at 37° for 16 h. The crosslinked collagen material was extruded out of the plunger end of the syringe and the resulting crosslinked cylindrical gels were then sectioned into 5 mm thick disks. The solubilization of crosslinked collagen in trypsin solution and oxidative degradation in 3% H2O2 was 7 and 14 days, resp. After implantation of the crosslinked collagen in rats for 90 days it had a discrete, football-shaped, bolus-like configuration, whereas noncrosslinked formulation was present as a more diffuse mass.

L52 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:599239 CAPLUS
DOCUMENT NUMBER: 125:285010
TITLE: Method of preparing crosslinked polymeric biomaterial compositions for use in tissue augmentation
INVENTOR(S): Rhee, Woonza M.; Berg, Richard A.; Rosenblatt, Joel S.; Tefft, Jacqueline A.; Braga, Larry J.; Smestad, Thomas L.
PATENT ASSIGNEE(S): USA
SOURCE: U.S., 14 pp., Cont.-in-part of U.S. Ser. No. 236,769.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 18
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5550187	A	19960827	US 1994-287549	19940808
US 5162430	A	19921110	US 1989-433441	19891114
US 5328955	A	19940712	US 1992-922541	19920730
US 5304595	A	19940419	US 1992-998802	19921230
US 5306500	A	19940426	US 1993-110577	19930823
US 5376375	A	19941227	US 1994-177578	19940105
US 5413791	A	19950509	US 1994-198128	19940217
US 5475052	A	19951212	US 1994-236769	19940502
US 5523348	A	19960604	US 1994-292415	19940818
US 5543441	A	19960806	US 1995-427576	19950424
US 5527856	A	19960618	US 1995-440274	19950512
US 5643464	A	19970701	US 1995-497573	19950630
EP 697218	A2	19960221	EP 1995-112218	19950803
EP 697218	A3	19960529		
R: DE, FR, GB, IT				

PRIORITY APPLN. INFO.:		
US 1988-274071	B2	19881121
US 1989-433441	A2	19891114
US 1992-922541	A3	19920730
US 1994-198128	A2	19940217
US 1994-236769	A2	19940502
US 1992-930142	A3	19920814
US 1993-110577	A3	19930823
US 1994-177578	A3	19940105
US 1994-287549	A3	19940808
US 1994-292415	A3	19940818
US 1995-497573	A	19950630

AB The present invention discloses a novel method for preparing crosslinked biomaterial compns. for use in the augmentation of soft or hard tissue. In general, the method comprises mixing a biocompatible polymer, which is preferably collagen, with a sterile, dry crosslinking agent, which is preferably a synthetic hydrophilic polymer such as a functionally activated polyethylene glycol. Also provided are preferred processes for

preparing sterile, dry crosslinking agents contained within syringes for use in the method of the invention. Methods for sterilization of the crosslinking agent include, but are not limited to, sterile filtration, aseptic processing, and e-beam or gamma irradiation Methods for providing augmentation of soft or hard tissue using crosslinked biomaterial compns. prepared according to the method of the invention are also disclosed. A sterile, dry crosslinking agent was prepared by mixing 1500 mg of disfunctionally activated PEG succinimidyl glutarate with 150 mL of water for injection and filtration sterilization using a Durapore filter; 0.5 mL of solution obtained was aliquotted into each of 180 3 cc syringes and lyophilized.

L52 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:195160 CAPLUS
DOCUMENT NUMBER: 124:242408
TITLE: Method of preparing crosslinked biomaterial compositions for use in tissue augmentation
INVENTOR(S): Rhee, Woonza M.; Berg, Richard A.; Rosenblatt, Joel S.; Schroeder, Jacqueline A.; Braga, Larry J.; Smestad, Thomas L.; Freeman, Abigal
PATENT ASSIGNEE(S): Collagen Corporation, USA
SOURCE: Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 18
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 697218	A2	19960221	EP 1995-112218	19950803
EP 697218	A3	19960529		
R: DE, FR, GB, IT				
US 5550187	A	19960827	US 1994-287549	19940808
US 5643464	A	19970701	US 1995-497573	19950630
PRIORITY APPLN. INFO.:			US 1994-287549 A	19940808
			US 1995-497573 A	19950630
			US 1988-274071 B2	19881121
			US 1989-433441 A2	19891114
			US 1992-922541 A3	19920730
			US 1994-198128 A2	19940217
			US 1994-236769 A2	19940502

AB The present invention discloses a novel method for preparing crosslinked biomaterial compns. for use in the augmentation of soft or hard tissue. In general, the method comprises mixing a biocompatible polymer, which is preferably collagen, with a sterile, dry crosslinking agent, which is preferably a synthetic hydrophilic polymer such as a functionally activated polyethylene glycol. Also provided are preferred processes for preparing sterile, dry crosslinking agents contained within syringes for use in the method of the invention. Methods for sterilization of the crosslinking agent include, but are not limited to, sterile filtration, aseptic processing, and electron beam or γ-ray irradiation Methods for providing augmentation of soft or hard tissue using crosslinked biomaterial compns. prepared according to the method of the invention are also disclosed. Difunctionally activated PEG succinimidyl glutarate (DSG-PEG) was pelleted with NaCl and the pellet was placed in the barrel of a syringe and mixed with Zyderm I collagen (12 mols of DSG-PEG per mol of collagen) in a syringe and then, a mixture was allowed to crosslink in the syringe. The obtained gel showed a good strength.

STN Search - 10/517,692

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=> log h
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                      52.36     321.40

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                      -6.40     -51.20

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 11:09:38 ON 31 JAN 2008

Connecting via Winsock to STN



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LOGINID:SSPTASYG1600

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
fSESSION RESUMED IN FILE 'CAPLUS' AT 11:23:24 ON 31 JAN 2008
FILE 'CAPLUS' ENTERED AT 11:23:24 ON 31 JAN 2008
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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                      52.36     321.40

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                      -6.40     -51.20

=> fil caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                      53.32     322.36

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                      -6.40     -51.20

FILE 'CAPLUS' ENTERED AT 11:24:22 ON 31 JAN 2008
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STN Search - 10/517,692

FILE COVERS 1907 - 31 Jan 2008 VOL 148 ISS 5
FILE LAST UPDATED: 30 Jan 2008 (20080130/ED)

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http://www.cas.org/infopolicy.html

=> d his

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     (FILE 'HOME' ENTERED AT 09:04:35 ON 31 JAN 2008)

     FILE 'REGISTRY' ENTERED AT 09:04:41 ON 31 JAN 2008
                E CITRIC ACID
                E CITRIC ACID/CN
                E MALIC ACID/CN
L1              1 S E3
                E CITRIC ACID/CN
L2          15758 S E 3
                E OXALACETIC ACID/CN
L3              1 S E3
                E CITRIC ACID/CN
L4              1 S E3
                E ACONITIC ACID/CN
L5              1 S E3
                E MALATE
L6           5352 S E3

     FILE 'CAPLUS' ENTERED AT 09:09:21 ON 31 JAN 2008
L7        1016908 S L1 OR L2 OR L3 OR L4 OR L5 OR L6
L8          22764 S L1
L9         920942 S L2
L10          4146 S L3
L11         68175 S L4
L12          1003 S L5
L13         22725 S L6

     FILE 'REGISTRY' ENTERED AT 09:10:08 ON 31 JAN 2008
                E HYDROXYSUCCINIMIDE
                E N-HYDROXYSUCCINIMIDE/CN
L14             1 S E3
                E N-HYDROXYSULFOSUCCINIMIDE/CN
L15             1 S E3

     FILE 'CAPLUS' ENTERED AT 09:10:58 ON 31 JAN 2008
L16          5280 S L14
L17           312 S L15
L18          5501 S L16 OR L17
L19           162 S L15 AND (PY<=2003)
L20        784186 S L7 AND (PY<=2003)
L21         18251 S L8 AND (PY<=2003)
L22        707903 S L9 AND (PY<=2003)
L23          3763 S L10 AND (PY<=2003)
L24         50287 S L11 AND (PY<=2003)
L25           890 S L12 AND (PY<=2003)
L26         19656 S L13 AND (PY<=2003)
L27             0 S L19 AND L25
L28             8 S L19 AND L20
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STN Search - 10/517,692

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     FILE 'REGISTRY' ENTERED AT 09:17:53 ON 31 JAN 2008
                E MALIC ACID/CN
L29           0 S E3/RACT

     FILE 'CAPLUS' ENTERED AT 09:19:17 ON 31 JAN 2008
L30        1540 S L1/RACT
L31       46553 S L2/RACT
L32         633 S L3/RACT
L33        4190 S L4/RACT
L34          42 S L5/RACT
L35         800 S L6/RACT
L36        4322 S L14/RACT
L37         184 S L15/RACT
L38       53062 S L30 OR L31 OR L32 OR L33 OR L34 OR L35
L39        4454 S L36 OR L37
L40       41864 S L38 AND (PY<=2003)
L41        3152 S L39 AND (PY<=2003)
L42          48 S L40 AND L41

     FILE 'CAPLUS' ENTERED AT 09:48:36 ON 31 JAN 2008
L43             STRUCTURE UPLOADED
                S L43

     FILE 'REGISTRY' ENTERED AT 09:49:10 ON 31 JAN 2008
L44           0 S L43

     FILE 'CAPLUS' ENTERED AT 09:49:10 ON 31 JAN 2008
L45           0 S L44

     FILE 'CAPLUS' ENTERED AT 11:02:13 ON 31 JAN 2008
                E CROSSLINKING+ALL/CT
L46       72274 S CROSSLINKING AGENT
L47      595653 S SULFATE
L48        2066 S L46 AND L47
L49           8 S CHRONDROITIN SULFATE
                E CHONDROITIN SULFATE+ALL/CT
L50       13474 S (CHONDROITIN SULFATE OR "CHONDROITIN, HYDROGEN SULFATE")
L51         116 S L46 AND L50
L52           8 S L51 AND BIOMATERIAL

     FILE 'CAPLUS' ENTERED AT 11:24:22 ON 31 JAN 2008

=> s l46 and biomaterial
         10076 BIOMATERIAL
         10856 BIOMATERIALS
         16264 BIOMATERIAL
                 (BIOMATERIAL OR BIOMATERIALS)
L53        168 L46 AND BIOMATERIAL

=> s l53 and citric acid
         94137 CITRIC
             2 CITRICS
         94139 CITRIC
                 (CITRIC OR CITRICS)
       4520828 ACID
       1611629 ACIDS
       5028375 ACID
                 (ACID OR ACIDS)
         89381 CITRIC ACID
                 (CITRIC(W)ACID)
```

L54 2 L53 AND CITRIC ACID

=> d ibib abs 1-2

L54 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:857406 CAPLUS
TITLE: Biomaterials from poly(carboxylic acid) crosslinked starch
AUTHOR(S): Yang, Yiqi; Reddy, Narendra
CORPORATE SOURCE: Department of Textiles, Clothing and Design and Department of Biological Systems Engineering, University of Nebraska-Lincoln, Lincoln, NE, 68583-0802, USA
SOURCE: Abstracts of Papers, 232nd ACS National Meeting, San Francisco, CA, United States, Sept. 10-14, 2006 (2006) , CARB-103. American Chemical Society: Washington, D. C.
CODEN: 69IHRD
DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)
LANGUAGE: English
AB Poly(carboxylic acids) such as citric acid and butanetetracarboxylic acid (BTCA) are inexpensive and non-toxic crosslinking agents that could be used to improve the properties of biomaterials produced from starch. Poly(carboxylic acid) crosslinked starch products are not only relatively inexpensive than starch acetate but have better mech. properties and water stability than similar starch acetate products. Fibers were produced from starch and crosslinked using poly(carboxylic acids) to study the suitability of poly(carboxylic acid) crosslinking as a alternative to starch acetate. Fibers were also produced from starch acetate with various degrees of substitution to compare the properties of crosslinked starch and starch acetate fibers. The fibers produced were tested for their mech. properties and phys. structure. Crosslinked starch fibers had about 300% increase in strength compared to the starch and starch acetate fibers with no change in the elongation of the fibers. Crosslinking also improved the water and biol. resistance of starch fibers. Poly(carboxylic acid) crosslinked starch shows promise to be a cheap alternative to starch acetate for biomaterials.

L54 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:529535 CAPLUS
DOCUMENT NUMBER: 133:137057
TITLE: Hot water-resistant gelatin gels useful as biomaterials
INVENTOR(S): Nagura, Masanobu; Mochizuki, Akira
PATENT ASSIGNEE(S): Terumo Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000212286	A	20000802	JP 1999-16038	19990125

PRIORITY APPLN. INFO.: JP 1999-16038 19990125
AB The gels are obtained from gelatin substance by crosslinking with polycarboxylic acids under heat and have swelling ratio (Sc) ≤1.0 where Sc = {Sc(40)/Sc(30)}/{Sh(40)/Sh(30)} and 30 and 40 are water temperature in degree (swelling degree Sc and Sh are derived from S = ((Ws-Wd)/Wd; Ws

= weight of gel at equilibrium state; Wd = weight of gel at dry state). Examples of
polycarboxylic acids are succinic acid, citric acid, and adipic acid.

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=> log h
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                      15.06     337.42

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                      -1.60     -52.80

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 11:27:54 ON 31 JAN 2008

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LOGINID:SSPTASYG1600

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 11:29:27 ON 31 JAN 2008
FILE 'CAPLUS' ENTERED AT 11:29:27 ON 31 JAN 2008
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                      15.06     337.42

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                      -1.60     -52.80

=> d his

     (FILE 'HOME' ENTERED AT 09:04:35 ON 31 JAN 2008)

     FILE 'REGISTRY' ENTERED AT 09:04:41 ON 31 JAN 2008
                E CITRIC ACID
                E CITRIC ACID/CN
                E MALIC ACID/CN
L1              1 S E3
                E CITRIC ACID/CN
L2          15758 S E 3
                E OXALACETIC ACID/CN
L3              1 S E3
                E CITRIC ACID/CN
L4              1 S E3
                E ACONITIC ACID/CN
L5              1 S E3
                E MALATE
L6           5352 S E3
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STN Search - 10/517,692

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     FILE 'CAPLUS' ENTERED AT 09:09:21 ON 31 JAN 2008
L7      1016908 S L1 OR L2 OR L3 OR L4 OR L5 OR L6
L8        22764 S L1
L9       920942 S L2
L10        4146 S L3
L11       68175 S L4
L12        1003 S L5
L13       22725 S L6

     FILE 'REGISTRY' ENTERED AT 09:10:08 ON 31 JAN 2008
               E HYDROXYSUCCINIMIDE
               E N-HYDROXYSUCCINIMIDE/CN
L14            1 S E3
               E N-HYDROXYSULFOSUCCINIMIDE/CN
L15            1 S E3

     FILE 'CAPLUS' ENTERED AT 09:10:58 ON 31 JAN 2008
L16         5280 S L14
L17          312 S L15
L18         5501 S L16 OR L17
L19          162 S L15 AND (PY<=2003)
L20       784186 S L7 AND (PY<=2003)
L21        18251 S L8 AND (PY<=2003)
L22       707903 S L9 AND (PY<=2003)
L23         3763 S L10 AND (PY<=2003)
L24        50287 S L11 AND (PY<=2003)
L25          890 S L12 AND (PY<=2003)
L26        19656 S L13 AND (PY<=2003)
L27            0 S L19 AND L25
L28            8 S L19 AND L20

     FILE 'REGISTRY' ENTERED AT 09:17:53 ON 31 JAN 2008
               E MALIC ACID/CN
L29            0 S E3/RACT

     FILE 'CAPLUS' ENTERED AT 09:19:17 ON 31 JAN 2008
L30         1540 S L1/RACT
L31        46553 S L2/RACT
L32          633 S L3/RACT
L33         4190 S L4/RACT
L34           42 S L5/RACT
L35          800 S L6/RACT
L36         4322 S L14/RACT
L37          184 S L15/RACT
L38        53062 S L30 OR L31 OR L32 OR L33 OR L34 OR L35
L39         4454 S L36 OR L37
L40        41864 S L38 AND (PY<=2003)
L41         3152 S L39 AND (PY<=2003)
L42           48 S L40 AND L41

     FILE 'CAPLUS' ENTERED AT 09:48:36 ON 31 JAN 2008
L43               STRUCTURE UPLOADED
                  S L43

     FILE 'REGISTRY' ENTERED AT 09:49:10 ON 31 JAN 2008
L44            0 S L43

     FILE 'CAPLUS' ENTERED AT 09:49:10 ON 31 JAN 2008
L45            0 S L44
```

STN Search - 10/517,692

```
     FILE 'CAPLUS' ENTERED AT 11:02:13 ON 31 JAN 2008
                E CROSSLINKING+ALL/CT
L46         72274 S CROSSLINKING AGENT
L47        595653 S SULFATE
L48          2066 S L46 AND L47
L49             8 S CHRONDROITIN SULFATE
                  E CHONDROITIN SULFATE+ALL/CT
L50         13474 S (CHONDROITIN SULFATE OR "CHONDROITIN, HYDROGEN SULFATE")
L51           116 S L46 AND L50
L52             8 S L51 AND BIOMATERIAL

     FILE 'CAPLUS' ENTERED AT 11:24:22 ON 31 JAN 2008
L53           168 S L46 AND BIOMATERIAL
L54             2 S L53 AND CITRIC ACID

=> s l53 and polycarboxylic acid
          13304 POLYCARBOXYLIC
        4520828 ACID
        1611629 ACIDS
        5028375 ACID
                  (ACID OR ACIDS)
          10596 POLYCARBOXYLIC ACID
                  (POLYCARBOXYLIC(W)ACID)
L55             1 L53 AND POLYCARBOXYLIC ACID

=> d ibib abs

L55  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2000:529535  CAPLUS
DOCUMENT NUMBER:          133:137057
TITLE:                    Hot water-resistant gelatin gels useful as
                          biomaterials
INVENTOR(S):              Nagura, Masanobu; Mochizuki, Akira
PATENT ASSIGNEE(S):       Terumo Corp., Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 4 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     JP 2000212286         A     20000802    JP 1999-16038           19990125
PRIORITY APPLN. INFO.:                       JP 1999-16038           19990125
AB   The gels are obtained from gelatin substance by crosslinking with
     polycarboxylic acids under heat and have swelling ratio (Sc)
     ≤1.0 where Sc = {Sc(40)/Sc(30)}/{Sh(40)/Sh(30)} and 30 and 40 are
     water temperature in degree (swelling degree Sc and Sh are derived from S =
     ((Ws-Wd)/Wd; Ws = weight of gel at equilibrium state; Wd = weight of gel at dry
     state).  Examples of polycarboxylic acids are succinic acid, citric
     acid, and adipic acid.


=> s l53 and carboxylic acid
         257842 CARBOXYLIC
             49 CARBOXYLICS
         257863 CARBOXYLIC
                  (CARBOXYLIC OR CARBOXYLICS)
        4520828 ACID
```

```
       1611629 ACIDS
       5028375 ACID
                 (ACID OR ACIDS)
        237609 CARBOXYLIC ACID
                 (CARBOXYLIC(W)ACID)
L56          6 L53 AND CARBOXYLIC ACID

=> d ibib abs 1-6

L56  ANSWER 1 OF 6  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:        2008:43481  CAPLUS
TITLE:                   Biomimetic polymers for tissue engineering
INVENTOR(S):             Wang, Yadong; Zern, Blaine; Gumera, Christiane
PATENT ASSIGNEE(S):      Georgia Tech Research Corporation, USA
SOURCE:                  PCT Int. Appl., 49pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
     WO 2008006064        A2    20080110    WO 2007-US72946        20070706
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA,
             CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI,
             GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,
             KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
             MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
             PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
             GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:                       US 2006-819219P     P  20060707
AB   Biodegradable polymers incorporating biomols. and methods of their use are
     provided.  Certain aspects provide biomols. crosslinked with diglycidyl
     esters.  The disclosed compns. have numerous applications including
     cellular regeneration, wound healing, and cellular differentiation.  Thus,
     a biomimetic polymer PCD was prepared by polymerization of diglycidyl
     1,2-cyclohexanedicarboxylate with dopamine in DMF at 90° in a 71%
     yield.  Polymerization of dopamine converted its primary amine to a tertiary
     amine, which limited the formation of dopaminechrome, the oxidative
     intermediate to dopamine quinone.  This increased the oxidative resistance
     of the catecholamine, thus minimizing the toxicity associated with dopamine
     quinone.  The ester bond in PCD rendered the polymer biodegradable, with a
     half-life in phosphate buffered saline solution of approx. 50 days at
     37°.  Preliminary in vivo biocompatibility studies indicated that
     PCD did not cause nerve degeneration of fibrous encapsulation when
     implanted immediately adjacent to rat sciatic nerves.  In vitro, neurites
     up to 180 μm long began to appear on PCD 3 days after seeding, and grew
     up to 250 μm after 5 days of culture.

L56  ANSWER 2 OF 6  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:        2006:857406  CAPLUS
TITLE:                   Biomaterials from poly(carboxylic acid)
                         crosslinked starch
AUTHOR(S):               Yang, Yiqi; Reddy, Narendra
```

CORPORATE SOURCE: Department of Textiles, Clothing and Design and Department of Biological Systems Engineering, University of Nebraska-Lincoln, Lincoln, NE, 68583-0802, USA
SOURCE: Abstracts of Papers, 232nd ACS National Meeting, San Francisco, CA, United States, Sept. 10-14, 2006 (2006) , CARB-103. American Chemical Society: Washington, D. C.
CODEN: 69IHRD
DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)
LANGUAGE: English

AB Poly(carboxylic acids) such as citric acid and butanetetracarboxylic acid (BTCA) are inexpensive and non-toxic crosslinking agents that could be used to improve the properties of biomaterials produced from starch. Poly(carboxylic acid) crosslinked starch products are not only relatively inexpensive than starch acetate but have better mech. properties and water stability than similar starch acetate products. Fibers were produced from starch and crosslinked using poly(carboxylic acids) to study the suitability of poly(carboxylic acid) crosslinking as a alternative to starch acetate. Fibers were also produced from starch acetate with various degrees of substitution to compare the properties of crosslinked starch and starch acetate fibers. The fibers produced were tested for their mech. properties and phys. structure. Crosslinked starch fibers had about 300% increase in strength compared to the starch and starch acetate fibers with no change in the elongation of the fibers. Crosslinking also improved the water and biol. resistance of starch fibers. Poly(carboxylic acid) crosslinked starch shows promise to be a cheap alternative to starch acetate for biomaterials.

L56 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:183216 CAPLUS
DOCUMENT NUMBER: 140:223219
TITLE: Controllable Surface Modification of Poly(lactic-co-glycolic acid) (PLGA) by Hydrolysis or Aminolysis I: Physical, Chemical, and Theoretical Aspects
AUTHOR(S): Croll, Tristan I.; O'Connor, Andrea J.; Stevens, Geoffrey W.; Cooper-White, Justin J.
CORPORATE SOURCE: Department of Chemical and Biomolecular Engineering, The University of Melbourne, Melbourne, 3010, Australia
SOURCE: Biomacromolecules (2004), 5(2), 463-473
CODEN: BOMAF6; ISSN: 1525-7797
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB While biodegradable, biocompatible polyesters such as poly (lactic-co-glycolic acid) (PLGA) are popular materials for the manufacture of tissue engineering scaffolds, their surface properties are not particularly suitable for directed tissue growth. Although a number of approaches to chemical modify the PLGA surface have been reported, their applicability to soft tissue scaffolds, which combine large vols., complex shapes, and extremely fine structures, is questionable. In this paper, we describe two wet-chemical methods, base hydrolysis and aminolysis, to introduce useful levels of carboxylic acid or primary and secondary amine groups, resp., onto the surface of PLGA with minimal degradation The effects of temperature, concentration, pH, and solvent type on the kinetics of these reactions are studied by following changes in the wettability of the PLGA

using contact angle measurements. In addition, the treated surfaces are studied using XPS to determine the effect on the surface chemical structure. Furthermore, we show using XPS anal. that these carboxyl and amine groups are readily activated to allow the covalent attachment of biol. macromols.
REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L56 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:529535 CAPLUS
DOCUMENT NUMBER: 133:137057
TITLE: Hot water-resistant gelatin gels useful as biomaterials
INVENTOR(S): Nagura, Masanobu; Mochizuki, Akira
PATENT ASSIGNEE(S): Terumo Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000212286	A	20000802	JP 1999-16038	19990125

PRIORITY APPLN. INFO.: JP 1999-16038 19990125
AB The gels are obtained from gelatin substance by crosslinking with polycarboxylic acids under heat and have swelling ratio (Sc) ≤1.0 where Sc = {Sc(40)/Sc(30)}/{Sh(40)/Sh(30)} and 30 and 40 are water temperature in degree (swelling degree Sc and Sh are derived from S = ((Ws-Wd)/Wd; Ws = weight of gel at equilibrium state; Wd = weight of gel at dry state). Examples of polycarboxylic acids are succinic acid, citric acid, and adipic acid.

L56 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:660894 CAPLUS
DOCUMENT NUMBER: 125:285011
TITLE: Use of hydrophobic crosslinking agents to prepare crosslinked biomaterial implants
INVENTOR(S): Rhee, Woonza M.
PATENT ASSIGNEE(S): Collagen Corporation, USA
SOURCE: Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 732109	A1	19960918	EP 1996-102366	19960216
R: AT, CH, DE, FR, GB, IT, LI, NL, SE				
CA 2165728	A1	19960915	CA 1995-2165728	19951220
JP 09249751	A	19970922	JP 1996-58138	19960314
US 6962979	B1	20051108	US 1999-344230	19990625
US 2004121951	A1	20040624	US 2003-448246	20030528
US 7129209	B2	20061031		
US 2005154125	A1	20050714	US 2004-997246	20041123
JP 2006181389	A	20060713	JP 2006-66762	20060310

PRIORITY APPLN. INFO.: US 1995-403358 A 19950314
JP 1996-58138 A3 19960314

US 1997-987467 B1 19971209
US 1999-344230 A1 19990625

AB Novel crosslinked biomaterial compns. are prepared using hydrophobic polymers as a crosslinking agent. Preferred hydrophobic polymers are those that contain two or more reactive succinimidyl groups, including disuccinimidyl suberate (I), bis(sulfosuccinimidyl) suberate, and dithiobis(succinimidyl propionate). Crosslinked biomaterial compns. prepared using mixts. of hydrophobic and hydrophilic crosslinking agents are also disclosed. The compns. of the present invention can be used to prepare formed implants for use in a variety of medical applications. Thus, 1.0 mL of 35 mg/mL collagen was mixed with 3 mg I in a syringe and incubated at 37° for 16 h. The crosslinked collagen material was extruded out of the plunger end of the syringe and the resulting crosslinked cylindrical gels were then sectioned into 5 mm thick disks. The solubilization of crosslinked collagen in trypsin solution and oxidative degradation in 3% H2O2 was 7 and 14 days, resp. After implantation of the crosslinked collagen in rats for 90 days it had a discrete, football-shaped, bolus-like configuration, whereas noncrosslinked formulation was present as a more diffuse mass.

L56 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:254782 CAPLUS
DOCUMENT NUMBER: 124:325312
TITLE: Crosslinking of dermal sheep collagen using a water-soluble carbodiimide
AUTHOR(S): Olde Damink, L. H. H.; Dijkstra, P. J.; van Luyn, M. J. A.; van Wachem, P. B.; Nieuwnehuis, P.; Feijen, J.
CORPORATE SOURCE: Dep. Chem. Technol., Univ. Twente, Enchede, 7500 AE, Neth.
SOURCE: Biomaterials (1996), 17(8), 765-73
CODEN: BIMADU; ISSN: 0142-9612
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A crosslinking method for collagen-based biomaterials was developed using the water-soluble carbodiimide 1-ethyl-3-(3-dimethyl aminopropyl)carbodiimide hydrochloride (EDC). Crosslinking using EDC involves the activation of carboxylic acid groups to give O-acylisourea groups, which form crosslinks after reaction with free amine groups. Treatment of dermal sheep collagen (DSC) with EDC (E-DSC) resulted in materials with an increased shrinkage temperature (Ts) and a decreased free amine group content, showing that crosslinking occurred. Addition of N-hydroxysuccinimide to the EDC-containing crosslinking solution (E/N-DSC) increased the rate of crosslinking. Crosslinking increased the Ts of non-crosslinked DSC samples from 56 to 73 °C for E-DSC and to 86 °C for E/N-DSC samples, resp. For both crosslinking methods a linear relation between the decrease in free amine group content and the increase in Ts was observed The tensile strength and the high strain modulus of E/N-DSC samples decreased upon crosslinking from 18 to 15 MPa and from 26 to 16 MPa, resp. The elongation at break of E/N-DSC increased upon crosslinking from 142 to 180%.

=> s l46 and citric acid
94137 CITRIC
2 CITRICS
94139 CITRIC
(CITRIC OR CITRICS)
4520828 ACID
1611629 ACIDS

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       5028375 ACID
                 (ACID OR ACIDS)
         89381 CITRIC ACID
                 (CITRIC(W)ACID)
L57        617 L46 AND CITRIC ACID

=> d his

     (FILE 'HOME' ENTERED AT 09:04:35 ON 31 JAN 2008)

     FILE 'REGISTRY' ENTERED AT 09:04:41 ON 31 JAN 2008
                 E CITRIC ACID
                 E CITRIC ACID/CN
                 E MALIC ACID/CN
L1             1 S E3
                 E CITRIC ACID/CN
L2         15758 S E 3
                 E OXALACETIC ACID/CN
L3             1 S E3
                 E CITRIC ACID/CN
L4             1 S E3
                 E ACONITIC ACID/CN
L5             1 S E3
                 E MALATE
L6          5352 S E3

     FILE 'CAPLUS' ENTERED AT 09:09:21 ON 31 JAN 2008
L7       1016908 S L1 OR L2 OR L3 OR L4 OR L5 OR L6
L8         22764 S L1
L9        920942 S L2
L10         4146 S L3
L11        68175 S L4
L12         1003 S L5
L13        22725 S L6

     FILE 'REGISTRY' ENTERED AT 09:10:08 ON 31 JAN 2008
                 E HYDROXYSUCCINIMIDE
                 E N-HYDROXYSUCCINIMIDE/CN
L14            1 S E3
                 E N-HYDROXYSULFOSUCCINIMIDE/CN
L15            1 S E3

     FILE 'CAPLUS' ENTERED AT 09:10:58 ON 31 JAN 2008
L16         5280 S L14
L17          312 S L15
L18         5501 S L16 OR L17
L19          162 S L15 AND (PY<=2003)
L20       784186 S L7 AND (PY<=2003)
L21        18251 S L8 AND (PY<=2003)
L22       707903 S L9 AND (PY<=2003)
L23         3763 S L10 AND (PY<=2003)
L24        50287 S L11 AND (PY<=2003)
L25          890 S L12 AND (PY<=2003)
L26        19656 S L13 AND (PY<=2003)
L27            0 S L19 AND L25
L28            8 S L19 AND L20

     FILE 'REGISTRY' ENTERED AT 09:17:53 ON 31 JAN 2008
                 E MALIC ACID/CN
L29            0 S E3/RACT
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STN Search - 10/517,692

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     FILE 'CAPLUS' ENTERED AT 09:19:17 ON 31 JAN 2008
L30         1540 S L1/RACT
L31        46553 S L2/RACT
L32          633 S L3/RACT
L33         4190 S L4/RACT
L34           42 S L5/RACT
L35          800 S L6/RACT
L36         4322 S L14/RACT
L37          184 S L15/RACT
L38        53062 S L30 OR L31 OR L32 OR L33 OR L34 OR L35
L39         4454 S L36 OR L37
L40        41864 S L38 AND (PY<=2003)
L41         3152 S L39 AND (PY<=2003)
L42           48 S L40 AND L41

     FILE 'CAPLUS' ENTERED AT 09:48:36 ON 31 JAN 2008
L43              STRUCTURE UPLOADED
                 S L43

     FILE 'REGISTRY' ENTERED AT 09:49:10 ON 31 JAN 2008
L44            0 S L43

     FILE 'CAPLUS' ENTERED AT 09:49:10 ON 31 JAN 2008
L45            0 S L44

     FILE 'CAPLUS' ENTERED AT 11:02:13 ON 31 JAN 2008
                 E CROSSLINKING+ALL/CT
L46        72274 S CROSSLINKING AGENT
L47       595653 S SULFATE
L48         2066 S L46 AND L47
L49            8 S CHRONDROITIN SULFATE
                 E CHONDROITIN SULFATE+ALL/CT
L50        13474 S (CHONDROITIN SULFATE OR "CHONDROITIN, HYDROGEN SULFATE")
L51          116 S L46 AND L50
L52            8 S L51 AND BIOMATERIAL

     FILE 'CAPLUS' ENTERED AT 11:24:22 ON 31 JAN 2008
L53          168 S L46 AND BIOMATERIAL
L54            2 S L53 AND CITRIC ACID
L55            1 S L53 AND POLYCARBOXYLIC ACID
L56            6 S L53 AND CARBOXYLIC ACID
L57          617 S L46 AND CITRIC ACID

=> s l57 and collagen
         95914 COLLAGEN
         68797 COLLAGENS
        107638 COLLAGEN
                 (COLLAGEN OR COLLAGENS)
L58         17 L57 AND COLLAGEN

=> d ibib abs 1-17

L58  ANSWER 1 OF 17  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:        2007:1454937  CAPLUS
DOCUMENT NUMBER:         148:85879
TITLE:                   Collagen cross-linking agents such as bioflavonoid
                         compounds, grape seed extract, casein
                         phosphopeptide-amorphous calcium phosphate, or iridoid
                         compounds, on dental restorative treatment and
```

preventive dentistry

INVENTOR(S): Bedran-Russo, Ana K.
PATENT ASSIGNEE(S): The Board of Trustees of the University of Illinois, USA

SOURCE: PCT Int. Appl., 45pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007146841	A2	20071221	WO 2007-US70809	20070608

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2006-812664P P 20060609
US 2007-918640P P 20070316

AB The invention relates to the development of compns. and methods for increasing the amount of collagen crosslinking in a mammalian tissue. A typical composition as described herein includes at least one crosslinking agent such as a bioflavonoid compound (e.g., proanthocyanidin), a grape seed extract, a casein phosphopeptide-amorphous calcium phosphate, or an iridoid compound (e.g., genipin) in an amount effective for increasing collagen crosslinking in the mammalian tissue in a pharmaceutically acceptable carrier. A typical method for increasing the amount of collagen crosslinking in dentin in a mammalian tooth includes the steps of preparing the surface of the tooth to be treated; and applying a composition including at least one of a bioflavonoid compound, a grape seed extract, a casein phosphopeptide-amorphous calcium phosphate, and an iridoid compound in a pharmaceutically acceptable carrier to the tooth surface for a time period of 0.0001 h to about 4 h. In some embodiments, two or more crosslinking agents are included in the compns. described herein. The compns. and methods as described herein are particularly useful for applying to dentin in a mammalian tooth requiring a restorative procedure for improving the mech. properties of restoration interfaces to withstand degradation over time. Compns. containing one of the collagen crosslinking agents as described herein were applied to dentin collagen and resulted in a significant improvement in ultimate tensile strength indicating the value of these compns. in restorative dentistry. The compns. and methods described herein will also find use in preventive dentistry applications, and can be applied to sound dentin, caries-affected dentin, and dentin that is impaired, weak, or degraded in any way. Thus, the effect of three biocompatible collagen crosslinking agents on the ultimate tensile strength (UTS) of dentin was tested: 5% glutaraldehyde (GD); 0.5% proanthocyanidin PBS solution (PA); and 0.625% genipin PBS solution (GE). A highly significant increase in UTS values was observed after PA dentin treatment, compared to the control and the other two crosslinking agents: the increase of almost 70% and 110% in the UTS values after PA treatment during 4 and 40 h, resp., indicates a

great potential of the agent to induce crosslinks in the dentin collagen.

L58 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:813931 CAPLUS
DOCUMENT NUMBER: 147:183443
TITLE: Protein compositions containing water soluble salts, and their articles with improved mechanical properties
INVENTOR(S): Hirase, Ryuji; Nakagawa, Kazuharu; Kubo, Junichi
PATENT ASSIGNEE(S): Hyogo Prefecture, Japan; Ako Kasei Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 12pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007186556	A	20070726	JP 2006-4289	20060112

PRIORITY APPLN. INFO.: JP 2006-4289 20060112
AB The compns., which can be formed into shaped articles such as films, sheets, yarns, and rods for industrial materials or foods, contain proteins and water-soluble inorg. salt hydrates or water-soluble organic acid metal salt hydrates. The compns. may also contain crosslinking agents. Thus, an aqueous solution containing 5 g JS-110 (gelatin) was mixed with 1.0 g MgCl2.6H2O, cast in a mold, and dried at 50° for .apprx.48 h to give a film showing maximum stress 8.3 MPa and elongation at break 256.8%.

L58 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:729205 CAPLUS
DOCUMENT NUMBER: 147:156885
TITLE: Production of chiral materials using crystallization inhibitors
INVENTOR(S): Valluzzi, Regina; Liu, Liya
PATENT ASSIGNEE(S): Evolved Nanomaterial Sciences, Inc., USA
SOURCE: PCT Int. Appl., 53pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007075609	A2	20070705	WO 2006-US48312	20061219
WO 2007075609	A3	20070913		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
US 2007255042	A1	20071101	US 2006-641344	20061219

PRIORITY APPLN. INFO.: US 2005-751545P P 20051219
US 2006-785669P P 20060324

AB A method is disclosed for producing a chiral gel. A polymer including chiral monomers, such as a protein, is dissolved to generate a sol, which is optionally dialyzed. The sol is contacted with a crystallization inhibitor that allows it to form a gel. The gel in wet or dried form is useful for performing chiral sepns.

L58 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1349735 CAPLUS
DOCUMENT NUMBER: 146:87679
TITLE: Solid-liquid mixing two-component-type biodegradable medical adhesive materials
INVENTOR(S): Taguchi, Satoshi; Kakinoki, Sachiro; Tanaka, Junzo; Saito, Hiroshi
PATENT ASSIGNEE(S): National Institute of Materials Science, Japan; Furuuchi Kagaku Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 11pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006346049	A	20061228	JP 2005-174414	20050614

PRIORITY APPLN. INFO.: JP 2005-174414 20050614

AB The invention relates to a two-agent-type biodegradable medical adhesive material consisting of a liquid adhesive agent and a powder hardening agent for use by mixing together at the usage. The liquid adhesive agent contains water, biodegradable polymer, and a solution with metal ions which interacts with the biodegradable polymer through electrostatic effect or cheating effect, or the liquid adhesive agent contains a biodegradable polymer dissolved in a buffer solution The powder agent contains a di- or tri-carboxylic acid derivative whose at least 2 carboxylic groups are modified by electron-attracting groups, e.g. succinimidyl, sulfosuccinimidyl, maleimidyl, phthalimidyl, imidazolyl, nitrophenyl, and tresyl. The biodegradable polymer and the hardening agent are reacted by mixing to form a crosslinked adhesive material. For example, human-derived albumin in phosphate buffer solution was mixed with citric acid N-hydroxysuccinimide derivative to form an adhesive material.

L58 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:428813 CAPLUS
DOCUMENT NUMBER: 140:412344
TITLE: Pharmaceutical compositions and dosage forms for buccal and sublingual delivery of tizanidine and methods of administering tizanidine sublingually or bucally
INVENTOR(S): Lerner, Itzhak E.; Flashner-Barak, Moshe; Rosenberger, Vered
PATENT ASSIGNEE(S): Teva Pharmaceutical Industries Ltd., Israel; Teva Pharmaceutical USA, Inc.
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004043431	A1	20040527	WO 2003-US35002	20031103
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2505861	A1	20040527	CA 2003-2505861	20031103
AU 2003287488	A1	20040603	AU 2003-287488	20031103
AU 2003287488	B2	20070405		
US 2004122065	A1	20040624	US 2003-699991	20031103
BR 2003015482	A	20050823	BR 2003-15482	20031103
EP 1567124	A1	20050831	EP 2003-781729	20031103
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1738600	A	20060222	CN 2003-80108649	20031103
JP 2006508122	T	20060309	JP 2004-551688	20031103
MX 2005PA05038	A	20050701	MX 2005-PA5038	20050511
PRIORITY APPLN. INFO.:			US 2002-425326P P	20021112
			WO 2003-US35002 W	20031103

AB Sublingual and buccal administration of the muscle spasm suppressor tizanidine increase its bioavailability by avoiding first-pass metabolism in the liver and reduce the inter-patient variation in bioavailability.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L58 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:354279 CAPLUS
DOCUMENT NUMBER: 140:344534
TITLE: Antiinflammatory sheet packs containing glycyrrhetinic acid, glycyrrhizic acid, or their esters
INVENTOR(S): Hinobu, Kimiko; Iida, Norio
PATENT ASSIGNEE(S): Lion Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004131383	A	20040430	JP 2002-184592	20020625
PRIORITY APPLN. INFO.:			JP 2002-184592	20020625

AB A sheet pack comprises a support and an aqueous pressure-sensitive adhesive containing crosslinked polyacrylate matrix, ≥1 inflammation inhibitors selected from glycyrrhetinic acid, glycyrrhizic acid, and their esters, and H2O. The pack is less skin-irritating and conditions skin damaged by drying, allergy, UV, sunburn, etc. A laminate of a polyethylene film and a thermally-bonded polyester nonwoven fabric was coated with an adhesive composition containing poly(acrylic acid) (mol. weight 100,000-300,000) 3, poly(acrylic acid) (mol. weight 500,000-1,200,000) 2, Na polyacrylate 1.5, CM-cellulose Na 3, glycerin 15, 70% sorbitol solution 10, polyoxyethylene

lauryl ether 1, methylparaben 0.2, glycyrrhetinic acid 0.1, Aloe extract 0.1, alginic acid 0.5, bentonite 2, synthetic hydrotalcite 0.1, Al glycinate 0.1, Na edetate 0.01%, and H2O balance and covered with a PET film to give a sheet pack. The pack showed good face-moisturizing effect in female volunteers.

L58 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:252481 CAPLUS
DOCUMENT NUMBER: 140:287718
TITLE: Preparation of biological low-molecular weight carboxylic acid derivatives as crosslinking agents for biopolymers
INVENTOR(S): Taguchi, Tetsushi; Kobayashi, Naotoshi; Tanaka, Junzo; Saito, Hiroshi
PATENT ASSIGNEE(S): National Institute for Materials Science, Japan; Furuuchi Chemical Corporation
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2004024686	A1	20040325	WO 2003-JP11669		20030911
W: CA, CN, US					
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR					
JP 2004099562	A	20040402	JP 2002-265982		20020911
CA 2499606	A1	20040325	CA 2003-2499606		20030911
EP 1548004	A1	20050629	EP 2003-795411		20030911
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK					
CN 1681780	A	20051012	CN 2003-821540		20030911
US 2006128948	A1	20060615	US 2005-527694		20051101
PRIORITY APPLN. INFO.:			JP 2002-265982	A	20020911
			WO 2003-JP11669	W	20030911

AB It is pointed out that the existing crosslinking agents and condensing agents having been employed in biol. adhesives and in treating medical devices such as cardiac valves, which are non-natural products synthesized artificially, are not metabolized in vivo and exhibit toxicity to living bodies. Therefore, these products can be used only in a restricted amount and for limited purposes in the clin. field. It is intended to provide biol. low-mol. weight derivs. obtained by modifying a carboxyl group of a biol. low-mol. weight compound such as malic acid, oxalacetic acid, citric acid, cis-aconitic acid, and 2-ketoglutaric acid with N-hydroxysuccinimide, N-hydroxysulfosuccinimide or derivs. thereof and crosslinked high-mol. weight compds. obtained by crosslinking various high-mol. weight compds. such as polysaccharides and proteins with the use of the above derivative Gels containing biopolymers and crosslinking agents are crosslinked directly at disease sites and applied as bioadhesives, hemostatics, vascular embolus agents, encapsulants for aneurysm. Crosslinked biopolymers are used as adhesion inhibitors, base materials for tissue regeneration, and drug carriers.
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L58 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:183096 CAPLUS

DOCUMENT NUMBER: 140:234396
TITLE: Antibodies and other binding agents specific to thrombospondin fragments for diagnosis of cancer and other diseases
INVENTOR(S): Williams, Kevin J.
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004018995	A2	20040304	WO 2003-US326023	20030820
WO 2004018995	A3	20040910		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2004053392	A1	20040318	US 2003-419462	20030421
CA 2496984	A1	20040304	CA 2003-2496984	20030820
AU 2003262727	A1	20040311	AU 2003-262727	20030820
EP 1572225	A2	20050914	EP 2003-793149	20030820
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005065324	A1	20050324	US 2004-782968	20040220
US 2006257947	A1	20061116	US 2006-525610	20060324
PRIORITY APPLN. INFO.:			US 2002-405494P P	20020823
			US 2003-419462 A	20030421
			WO 2003-US26023 W	20030820

AB The invention relates to thrombospondin fragments found in plasma, their use or use of portions thereof in diagnostic methods, as method calibrators, method indicators, and as immunogens, and as analytes for methods with substantial clin. utility; and their detection in plasma or other bodily fluids for purpose of diagnostic methods, especially for cancer. The thrombospondin fragments include fibronectin-binding domain, procollagen homol. region, type 1 and 2 repeats, amino-terminal domain, and heparin-binding domain. The antibodies are useful for diagnosis of cancer, metastasis, renal failure, atopic dermatitis, acute vasculitis, asthma, diabetes mellitus, rheumatoid arthritis, myocaridal infarction, inlfammatory disease, blood clotting conditions, etc.

L58 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:142611 CAPLUS
DOCUMENT NUMBER: 140:187393
TITLE: Composite matrix containing chitosan derivatives for microcapsules
INVENTOR(S): Chen, Yuan Han; Yeh, Ming Hsi; Lai, Huey Min
PATENT ASSIGNEE(S): Industrial Technology Research Institute, Taiwan; Chiu, Kuo-Cheng
SOURCE: U.S. Pat. Appl. Publ., 8 pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004033265	A1	20040219	US 2002-329712	20021227
PRIORITY APPLN. INFO.:			TW 2001-90133359 A	20011231

AB A method for preparation of a composite matrix containing chitosan derivs., comprising the steps of: (i) providing an anionic chitosan derivative solution (A); (ii) providing a cationic polysaccharide solution (B); and (iii) mixing solution (A) and solution (B) to form microcapsules. Metallic ion crosslinking agent and/or natural protein solution can be added optionally to adjust the mech. strength of the shell and the interior physic state of the microcapsules. For example, 2 weight% N,O-carboxymethyl chitosan (NOCC) solution was dropped into the stirring mixture containing 1 weight% to 4 weight% of chitosan dissolved in 1 weight% acetic acid solution, 1 weight% collagen dissolved in 1 weight% acetic acid solution, and 1M to 5M of calcium chloride solution, wherein the weight ratio of chitosan to collagen to calcium ion is 6:1:3, 9:2:9 or 3:1:6. The NOCC converses to microcapsules immediately when it contacts the mixture The diameter of the microcapsule could be adjusted by controlling size of the droplet. The diameter of thus obtained microcapsules ranges from 8 mm to 0.2 mm. The shell of the microcapsules increases with soaking time, and microcapsules with liquid interior will form ultimately.

L58 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:59579 CAPLUS
DOCUMENT NUMBER: 140:99664
TITLE: Preparation of a biodegradable thermal-sensitive gel system
INVENTOR(S): Chen, Yuan-han; Yeh, Ming-hsi; Lai, Huey-min
PATENT ASSIGNEE(S): Industrial Technology Research Institute, Taiwan
SOURCE: U.S. Pat. Appl. Publ., 11 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004013733	A1	20040122	US 2002-330085	20021230
TW 245634	B	20051221	TW 2002-91124213	20021021
PRIORITY APPLN. INFO.:			TW 2001-90132965 A	20011228
			TW 2002-91124213 A	20021021

AB The present invention relates to a biodegradable thermal-sensitive gel system, which comprises at least one polysaccharide solution, at least one electrolytic salt, and at least one buffer solution for adjusting pH. A natural protein as well as a crosslinking agent can be added to the gel system optionally. Said gel system is liquid at room temperature (25°c) and solidifies at or above 37°c. The present invention also relates to a process for preparing said gel system, and a use for drug releasing carrier. For example, a gel system with natural proteins was prepared by adding 4 mL of 4 weight% chitosan (in 1 weight% acetic acid) and 1 mL of 1 weight% collagen (in 1 weight% acetic acid) to 3 mL of PBS (pH 7.6) at room temperature with stirring, followed by 1 mL of 56 weight% glycerol-phosphate and 1 mL of

0.5 M NaHCO3 to adjust the pH value of the solution to 7.2. The product thus obtained is liquid and will solidify while the temperature rises to 37°, which needs about 3 min.

L58 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:122835 CAPLUS
DOCUMENT NUMBER: 136:172843
TITLE: Method for the production of chitosan-based films with enhanced cell adhering capacity, resulting product and applications
INVENTOR(S): Lopez Lacomba, Jose Luis; Garcia Cantalejo, Jesus Manuel; Sanz Casado, Jose Vicente; Ramos, Viviana Monica
PATENT ASSIGNEE(S): Osfarma, S.L., Spain
SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Spanish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002011782	A1	20020214	WO 2001-ES322	20010810
WO 2002011782	A8	20020711		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
ES 2169681	A1	20020701	ES 2000-2057	20000810
ES 2169681	B1	20031001		
AU 2001082153	A5	20020218	AU 2001-82153	20010810
EP 1308177	A1	20030507	EP 2001-960753	20010810
EP 1308177	B1	20050511		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001013106	A	20030715	BR 2001-13106	20010810
JP 2004505678	T	20040226	JP 2002-517114	20010810
AT 295190	T	20050515	AT 2001-960753	20010810
ES 2246337	T3	20060216	ES 2001-1960753	20010810
US 2003124172	A1	20030703	US 2003-364827	20030210

PRIORITY APPLN. INFO.: ES 2000-2057 A 20000810
WO 2001-ES322 W 20010810

AB Said method generally involves forming a chitosan-based film; stabilizing said film; activating the cell adhering capacity by drying the stabilized film and washing. The film can also be activated biol. by fixing a substance with biol. activity. The resulting films exhibit enhanced cell adhering capacity and are optionally biol. activated. Said films can be used to induce biol. activity in a receiver organism and/or enhance osteo-integration of implants used in odontol. or traumatol. and/or regenerate bone tissue.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L58 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:508939 CAPLUS
DOCUMENT NUMBER: 133:94623
TITLE: Manufacture of medical collagen sponge
INVENTOR(S): Zhan, Lifen
PATENT ASSIGNEE(S): Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 6 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1210019	A	19990310	CN 1998-117763	19980910
PRIORITY APPLN. INFO.:			CN 1998-117763	19980910

AB The title process comprises cleaning bovine tendon, sterilizing, treating with protease, then treating successively with acid, base and organic solvent to obtain pure collagen, crosslinking, and drying at (-40)-35°. The protease is selected from pepsase, papain, trypsin, and bromelin; the base from NaOH, KOH, NaHCO3, and Na2CO3; the acid from formic acid, acetic acid, malonic acid, and citric acid; the organic solvent from methanol, ethanol, Et ether, acetone, and butanol; and the crosslinking agent from formaldehyde, acetaldehyde, and glutaraldehyde. The collagen sponge is useful for wound healing and as hemostatic.

L58 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:61902 CAPLUS
DOCUMENT NUMBER: 118:61902
TITLE: Collagen manufacture from intestines, ruminant stomachs, lungs, and udders
INVENTOR(S): Sjoelander, E.
PATENT ASSIGNEE(S): Collagen Casing Einar Sjoelander AB, Swed.
SOURCE: Swed., 10 pp.
CODEN: SSXXAY
DOCUMENT TYPE: Patent
LANGUAGE: Swedish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SE 467739	B	19920907	SE 1991-999	19910405
SE 9100999	A	19920907		
SE 467739	C	19930121		
SE 9200649	A	19921006	SE 1992-649	19920304
CA 2107680	A1	19921006	CA 1992-2107680	19920326
WO 9217503	A1	19921015	WO 1992-SE192	19920326
W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE, US				
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, MC, ML, MR, NL, SE, SN, TD, TG				
AU 9214221	A	19921102	AU 1992-14221	19920326
EP 578661	A1	19940119	EP 1992-906906	19920326
EP 578661	B1	19960911		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL				
JP 06505982	T	19940707	JP 1992-506589	19920326
AT 142647	T	19960915	AT 1992-906906	19920326
ES 2094904	T3	19970201	ES 1992-906906	19920326
NO 9303507	A	19930930	NO 1993-3507	19930930

RU 2094999	C1	19971110	RU 1993-58205	19931004
US 5411887	A	19950502	US 1993-133083	19931005
PRIORITY APPLN. INFO.:			SE 1991-999 A	19910405
			WO 1992-SE192 A	19920326

AB The process comprises cleaning the starting material, immersing the material in ice water, adjusting the pH to 5.5, grinding the mixture of ice water and starting material, adding addnl. water in an amount such that the ground mixture contains approx. equal amts. of starting material and water, heating the mixture to 40-42° and adjusting the pH to ≤11, preferably 10.5, and adding a proteolytic enzyme in an amount corresponding to 60 Anson units/kg dry solids to allow the hydrolysis of proteins other than collagen, maintaining the pH by addition of alkali until the hydrolysis is completed, adjusting the pH to 5.5 by addition of acid, and separating and collecting the collagen. Clear, transparent films are obtained by mixing the collagen with a reducing agent, e.g., ascorbic acid or NaHSO3, ≤2, crosslinking agent, e.g., glutaraldehyde, .apprx.0.1, and plasticizer, i.e, glycerin, 5-10 weight% (all based on dry collagen).

L58 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1991:150178 CAPLUS
DOCUMENT NUMBER: 114:150178
TITLE: Manufacture of microcapsules from atelocollagen and polyholosides for cosmetic, pharmaceutical or food compositions
INVENTOR(S): Levy, Marie Christine; Andry, Marie Christine; Huc, Alain; Buffevant, Chantal
PATENT ASSIGNEE(S): Bioetica S. A., Fr.
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 381543	A1	19900808	EP 1990-400030	19900105
EP 381543	B1	19930526		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL				
FR 2642329	A1	19900803	FR 1989-1221	19890131
FR 2642329	B1	19910524		
AT 89766	T	19930615	AT 1990-400030	19900105
ES 2058827	T3	19941101	ES 1990-400030	19900105
AU 9048864	A	19900809	AU 1990-48864	19900129
AU 633866	B2	19930211		
CA 2009065	A1	19900731	CA 1990-2009065	19900131
CA 2009065	C	19990824		
JP 02229111	A	19900911	JP 1990-21927	19900131
JP 2534921	B2	19960918		
KR 163171	B1	19981201	KR 1990-1111	19900131
US 5395620	A	19950307	US 1993-74701	19930608
US 5622656	A	19970422	US 1994-328903	19941025
PRIORITY APPLN. INFO.:			FR 1989-1221 A	19890131
			US 1989-336711 A	19890412
			EP 1990-400030 A	19900105
			US 1991-749909 B1	19910826
			US 1993-74701 A3	19930608

AB The microcapsules of the invention comprise a mixed wall of crosslinked atelocollagen and polyholosides (e.g. glycosaminoglycans), the proportion

of the latter relative to the atelocollagen being preferably 18-50 weight%. The microcapsules can be manufactured either by a process involving interfacial crosslinking or by extrusion of a laminar flow which is broken up by vibrations into individual droplets, which fall in a crosslinking bath. The atelocollagen-containing microcapsules are biocompatible and are especially suitable for the manufacture of cosmetic, pharmaceutical, or food compns. Manufacture of microcapsules containing vitamin C, CD RED 30 pigment, olive oil, salmon oil, or oenethera oil is described.

L58 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1985:506605 CAPLUS
DOCUMENT NUMBER: 103:106605
ORIGINAL REFERENCE NO.: 103:17081a,17084a
TITLE: Shaped product of collagen by syneresis
INVENTOR(S): Yoden, Yoshimasa; Okuda, Tsuneo; Fuchigami, Eiji; Kuwabara, Toshihiro
PATENT ASSIGNEE(S): Nitta Gelatin Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 143512	A1	19850605	EP 1984-305534	19840814
EP 143512	B1	19880330		
EP 143512	B2	19910710		
R: DE, FR, GB, IT				
US 4533358	A	19850806	US 1984-632855	19840720
AU 8433461	A	19850418	AU 1984-33461	19840924
AU 569112	B2	19880121		
ES 536242	A1	19850716	ES 1984-536242	19840926
FI 8403840	A	19850330	FI 1984-3840	19840928
FI 77678	B	19881230		
FI 77678	C	19890410		

PRIORITY APPLN. INFO.: JP 1983-182437 A 19830929

AB Shaped products are prepared from collagen by applying a crosslinking agent to the pasty collagen composition being shaped, freezing the shaped product to enable the crosslinking reaction by separation of water, and thawing the crosslinked product. Thus, a fresh corium layer of unshaved oxhide was dipped for 10 days in 2 parts of 0.4% lime milk per 1 part corium, washed, neutralized by HCl, dipped 5 h in 2 parts 1% aqueous NH4Cl solution per 1 part corium, washed, and ground to give collagen fibers. An aqueous suspension containing the corium at 8% solids concentration and NaOH at 3% was prepared from 20% of the fibers and kept at 20° for 2 days. HCl was added to the emulsion at ≤20° to lower the pH to 4.0 and precipitate a fibrous agglomerate which was dehydrated. The remaining 80% of the fibers was added to the dehydrated product and swollen in aqueous citric acid at pH 3.0 at a solids concentration of 3.5%. The homogeneous mixture was homogenized to form a pasty composition which was extruded through an annular nozzle into a 20% saline coagulating solution containing 1000 ppm glutaraldehyde [111-30-8]at pH 9.5 and 20°. The extruded tube had pH 3.6, and it was left in the solution for 20 min. until its pH increased to 9.0, washed in flowing

water for 10 min, placed in a freezer at -20°, and kept frozen for 5 h. The tube had water content 96% before freezing and 75% after freezing and thawing. The bursting strength of the tube increased from 600 to 1500 mm H2O/cm2 after freezing and thawing. The wet tube was filled with sausage meat, dried at 75° for 20 min, and boiled 20 min at 80° to make a sausage which was cooked in a frying pan without breaking the tube.

L58 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1984:557716 CAPLUS
DOCUMENT NUMBER: 101:157716
ORIGINAL REFERENCE NO.: 101:23799a,23802a
TITLE: Collagen fleece
INVENTOR(S): Paques, Eric Paul; Fuhge, Peter
PATENT ASSIGNEE(S): Behringwerke A.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 11 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3248188	A1	19840628	DE 1982-3248188	19821227
EP 114351	A2	19840801	EP 1983-112861	19831221
EP 114351	A3	19850717		
EP 114351	B1	19890726		
R: AT, CH, DE, FR, IT, LI				
AT 44878	T	19890815	AT 1983-112861	19831221
JP 59133276	A	19840731	JP 1983-244360	19831226
ES 528400	A1	19850116	ES 1983-528400	19831226
PRIORITY APPLN. INFO.:			DE 1982-3248188 A	19821227
			EP 1983-112861 A	19831221

AB A collagen-containing material is treated with a neutral salt solution, a citric acid [77-92-9] solution, a solution of pepsin [9001-75-6], contacted with an ion exchanger, and the collagen is precipitated with a neutral salt, treated with a crosslinking agent, and dried to give a wound covering. Thus, 5 kg residue from the extraction of chopped placentas with isotonic saline was minced, extracted with pH 7.4 0.05 M Tris-HCl buffer containing 2 M NaCl, the residue washed with H2O at 4°, suspended in 1M citric acid for 1 h, and the residue was homogenized with H2O at 4°, centrifuged, suspended in 0.1M HOAc, and adjusted to pH 2 with HCl. The suspension was incubated twice with pepsin for 24 h at 25°, mixed with Dicalite, homogenized, and centrifuged. The supernatant was adjusted to pH 8 with Tris, stirred with Dowex 2-X8 for 1 h, solid NaCl was added to 0.2M, the mixture was centrifuged, the residue in H2O was brought to pH 5 with HOAc and dialyzed against H2O to give white collagen fibrils. The fibrils could be homogenized in H2O at pH 5, brought to pH 8, treated with H2CO [50-00-0] at 25°, and freeze-dried to give a fleece with good H2O absorption, strength, and elasticity.

L58 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1984:460178 CAPLUS
DOCUMENT NUMBER: 101:60178
ORIGINAL REFERENCE NO.: 101:9259a,9262a
TITLE: Collagen-glycosaminoglycan composite materials
INVENTOR(S): Yannas, Ioannis V.; Kirk, James F.
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, USA

STN Search - 10/517,692

SOURCE: U.S., 8 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4448718	A	19840515	US 1983-531804	19830913

PRIORITY APPLN. INFO.: US 1983-531804 19830913

AB A crosslinked collagen-glycosaminoglycan composite [Mc (average mol. weight of the segments between adjacent crosslinks) = 800-10,000] is prepared from contacting the uncrosslinked composite with a gaseous aldehyde. Artificial skin produced by this method is more stable toward long-term storage than similar materials produced by other methods. Thus, a collagen dispersion was prepared by contacting strips of calf hide with an aqueous solution containing propionic acid and benzoic acid. The collagen was purified by a precipitation process, then dispersed in a citric acid-buffer solution at pH 3.2. The dispersion was copptd. with a 1% chondroitin 6-sulfate solution (pH 3.2); the precipitate was homogenized, filtered, and dried.

A composite material prepared from the above mixture in the form of a sheet was crosslinked with glutaraldehyde [111-30-8] vapor generated from a 25% glutaraldehyde solution in a vented desiccator. The treated sheets had a much lower Mc than untreated sheets.

=> d his

(FILE 'HOME' ENTERED AT 09:04:35 ON 31 JAN 2008)

FILE 'REGISTRY' ENTERED AT 09:04:41 ON 31 JAN 2008
E CITRIC ACID
E CITRIC ACID/CN
E MALIC ACID/CN
L1 1 S E3
E CITRIC ACID/CN
L2 15758 S E 3
E OXALACETIC ACID/CN
L3 1 S E3
E CITRIC ACID/CN
L4 1 S E3
E ACONITIC ACID/CN
L5 1 S E3
E MALATE
L6 5352 S E3

FILE 'CAPLUS' ENTERED AT 09:09:21 ON 31 JAN 2008
L7 1016908 S L1 OR L2 OR L3 OR L4 OR L5 OR L6
L8 22764 S L1
L9 920942 S L2
L10 4146 S L3
L11 68175 S L4
L12 1003 S L5
L13 22725 S L6

FILE 'REGISTRY' ENTERED AT 09:10:08 ON 31 JAN 2008
E HYDROXYSUCCINIMIDE
E N-HYDROXYSUCCINIMIDE/CN

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L14           1 S E3
                E N-HYDROXYSULFOSUCCINIMIDE/CN
L15           1 S E3

     FILE 'CAPLUS' ENTERED AT 09:10:58 ON 31 JAN 2008
L16        5280 S L14
L17         312 S L15
L18        5501 S L16 OR L17
L19         162 S L15 AND (PY<=2003)
L20      784186 S L7 AND (PY<=2003)
L21       18251 S L8 AND (PY<=2003)
L22      707903 S L9 AND (PY<=2003)
L23        3763 S L10 AND (PY<=2003)
L24       50287 S L11 AND (PY<=2003)
L25         890 S L12 AND (PY<=2003)
L26       19656 S L13 AND (PY<=2003)
L27           0 S L19 AND L25
L28           8 S L19 AND L20

     FILE 'REGISTRY' ENTERED AT 09:17:53 ON 31 JAN 2008
                E MALIC ACID/CN
L29           0 S E3/RACT

     FILE 'CAPLUS' ENTERED AT 09:19:17 ON 31 JAN 2008
L30        1540 S L1/RACT
L31       46553 S L2/RACT
L32         633 S L3/RACT
L33        4190 S L4/RACT
L34          42 S L5/RACT
L35         800 S L6/RACT
L36        4322 S L14/RACT
L37         184 S L15/RACT
L38       53062 S L30 OR L31 OR L32 OR L33 OR L34 OR L35
L39        4454 S L36 OR L37
L40       41864 S L38 AND (PY<=2003)
L41        3152 S L39 AND (PY<=2003)
L42          48 S L40 AND L41

     FILE 'CAPLUS' ENTERED AT 09:48:36 ON 31 JAN 2008
L43             STRUCTURE UPLOADED
                S L43

     FILE 'REGISTRY' ENTERED AT 09:49:10 ON 31 JAN 2008
L44           0 S L43

     FILE 'CAPLUS' ENTERED AT 09:49:10 ON 31 JAN 2008
L45           0 S L44

     FILE 'CAPLUS' ENTERED AT 11:02:13 ON 31 JAN 2008
                E CROSSLINKING+ALL/CT
L46       72274 S CROSSLINKING AGENT
L47      595653 S SULFATE
L48        2066 S L46 AND L47
L49           8 S CHRONDROITIN SULFATE
                E CHONDROITIN SULFATE+ALL/CT
L50       13474 S (CHONDROITIN SULFATE OR "CHONDROITIN, HYDROGEN SULFATE")
L51         116 S L46 AND L50
L52           8 S L51 AND BIOMATERIAL

     FILE 'CAPLUS' ENTERED AT 11:24:22 ON 31 JAN 2008
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L53         168 S L46 AND BIOMATERIAL
L54           2 S L53 AND CITRIC ACID
L55           1 S L53 AND POLYCARBOXYLIC ACID
L56           6 S L53 AND CARBOXYLIC ACID
L57         617 S L46 AND CITRIC ACID
L58          17 S L57 AND COLLAGEN

=> s l46 and polycarboxylic acid
         13304 POLYCARBOXYLIC
       4520828 ACID
       1611629 ACIDS
       5028375 ACID
                 (ACID OR ACIDS)
         10596 POLYCARBOXYLIC ACID
                 (POLYCARBOXYLIC(W)ACID)
L59        733 L46 AND POLYCARBOXYLIC ACID

=> s l59 and collagen
         95914 COLLAGEN
         68797 COLLAGENS
        107638 COLLAGEN
                 (COLLAGEN OR COLLAGENS)
L60          0 L59 AND COLLAGEN

=> s l59 and gelatin
         72141 GELATIN
         30834 GELATINS
         83422 GELATIN
                 (GELATIN OR GELATINS)
L61          4 L59 AND GELATIN

=> d ibib abs 1-4

L61  ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2007:384892  CAPLUS
DOCUMENT NUMBER:          146:374899
TITLE:                    Immobilization of enzymes by adsorption on porous
                          carrier with subsequent crosslinking in the presence
                          of a polyfunctional amine for use in organic synthesis
INVENTOR(S):              Mazeaud, Isabelle; Poulsen, Poul Boerge Rosenius;
                          Christensen, Morten Wuertz; Brask, Jesper
PATENT ASSIGNEE(S):       Novozymes A/S, Den.
SOURCE:                   PCT Int. Appl., 32pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     WO 2007036235         A1    20070405    WO 2006-DK542           20061002
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
             KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN,
             MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS,
             RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

US 2007087418	A1	20070419	US 2006-541615		20061002
PRIORITY APPLN. INFO.:			DK 2005-1368	A	20050930
			US 2005-724862P	P	20051007

AB The present invention relates to the immobilization of enzymes by adsorbing enzymes, a polyfunctional amine and a crosslinking agent onto a particulate porous carrier in a mixer apparatus or in a fluid bed apparatus
The function of the polyfunctional amine is to provide a network of amine-groups available for covalent crosslinking with the crosslinking agent and the enzymes amine-groups. In particular, immobilization of lipase B on a silica-based carrier by impregnation and subsequent crosslinking by glutaraldehyde in the presence of polyethylene imine is described. The immobilized enzyme of the invention is useful for modification of organic compds. such as esterification, epoxidn., hydrolysis or ring opening.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L61 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	2000:529535 CAPLUS
DOCUMENT NUMBER:	133:137057
TITLE:	Hot water-resistant gelatin gels useful as biomaterials
INVENTOR(S):	Nagura, Masanobu; Mochizuki, Akira
PATENT ASSIGNEE(S):	Terumo Corp., Japan
SOURCE:	Jpn. Kokai Tokkyo Koho, 4 pp. CODEN: JKXXAF
DOCUMENT TYPE:	Patent
LANGUAGE:	Japanese
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000212286	A	20000802	JP 1999-16038	19990125
PRIORITY APPLN. INFO.:			JP 1999-16038	19990125

AB The gels are obtained from gelatin substance by crosslinking with polycarboxylic acids under heat and have swelling ratio (Sc) ≤1.0 where Sc = {Sc(40)/Sc(30)}/{Sh(40)/Sh(30)} and 30 and 40 are water temperature in degree (swelling degree Sc and Sh are derived from S = ((Ws-Wd)/Wd; Ws = weight of gel at equilibrium state; Wd = weight of gel at dry state). Examples of polycarboxylic acids are succinic acid, citric acid, and adipic acid.

L61 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	1994:53389 CAPLUS
DOCUMENT NUMBER:	120:53389
TITLE:	Ionic complexes of ionizable emulsifiers with ionizable polypeptides and/or ionizable hydrocolloids
INVENTOR(S):	Reimer, Robert A.; Carruthers, Mark S.; Corr, Robert J., Jr.; Miller, James W.; Tarlton, Eugene
PATENT ASSIGNEE(S):	Pfizer Inc., USA
SOURCE:	PCT Int. Appl., 37 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9321784	A1	19931111	WO 1993-US2167	19930316
W: AU, CA, JP, KR, NO, RU, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9339169	A	19931129	AU 1993-39169	19930316
EP 637209	A1	19950208	EP 1993-908296	19930316
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 07502172	T	19950309	JP 1993-519246	19930316
IL 105408	A	19970110	IL 1993-105408	19930415
ZA 9302839	A	19941024	ZA 1993-2839	19930422
NO 9404012	A	19941021	NO 1994-4012	19941021
PRIORITY APPLN. INFO.:			US 1992-872869 A1	19920423
			WO 1993-US2167 A	19930316

AB Complexes of ionizable emulsifiers with ionizable polypeptides and ionizable hydrocolloids are described for use as fat substitutes, food opacifiers, foam stabilizers and flavor modifiers. They are further useful as stiffeners for oils and oil-water emulsions allowing the use of normally liquid unsatd. oils in place of saturated fats in food compns. such as shortenings and spreads. Whey protein concentrate 40 was dissolved in water 600 g and a mixture of stearic acid 60% and palmitic acid 40% 100 g was added with stirring and heating to 75°. The pH of the mixture was adjusted to pH 6.8 with NaOH to form an opaque, viscous solution that after cooling and refrigeration had the appearance, odor, and texture of soft fat. The use of the fat substitutes of the invention in spreads, frosting, desserts, mayonnaise etc. is demonstrated.

L61 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:210254 CAPLUS
DOCUMENT NUMBER: 108:210254
TITLE: Process for manufacture of crosslinked gelatin-impregnated vascular grafts
INVENTOR(S): Maini, Roshan
PATENT ASSIGNEE(S): Vascutek Ltd., UK
SOURCE: Pat. Specif. (Aust.), 11 pp.
CODEN: ALXXAP
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
AU 569645	B2	19880211	AU 1985-50593	19851129
AU 8550593	A	19860605		
EP 183365	A3	19880406	EP 1985-307255	19851010
EP 183365	B1	19921230		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
AT 83911	T	19930115	AT 1985-307255	19851010
DK 172304	B1	19980309	DK 1985-5511	19851128
JP 02011258	B	19900313	JP 1985-267619	19851129
PRIORITY APPLN. INFO.:			GB 1984-30265 A	19841130
			EP 1985-307255 A	19851010

AB Vascular grafts, which require no blood preimpregnation, and which after implantation start to degrade and become permeable at a known rate so that tissue ingrowth can take place, are prepared by impregnating a tube of a

porous flexible material with gelatin and treating the impregnated tube with an amino group crosslinking agent. A tube formed as a knitted textile material structure was impregnated under vacuum with a mixture of a gelatin which had been treated with succinoyl chloride to cause crosslinking of 75% of its free amino groups and untreated gelatin (mole ratio 1:1) at 65°. The gelatin mixture was allowed to gel, and tubes subjected to a treatment with a 20% HCHO solution at pH 4 and 4° for 16 h, and the formed vascular graft washed 5 times in pyrogen-free H2O at room temperature This graft became fully porous after 25-30 h under laboratory test conditions. Comparison grafts prepared using untreated gelatin only became fully porous in > 45 h.

=> d his

(FILE 'HOME' ENTERED AT 09:04:35 ON 31 JAN 2008)

FILE 'REGISTRY' ENTERED AT 09:04:41 ON 31 JAN 2008
E CITRIC ACID
E CITRIC ACID/CN
E MALIC ACID/CN
L1 1 S E3
E CITRIC ACID/CN
L2 15758 S E 3
E OXALACETIC ACID/CN
L3 1 S E3
E CITRIC ACID/CN
L4 1 S E3
E ACONITIC ACID/CN
L5 1 S E3
E MALATE
L6 5352 S E3

FILE 'CAPLUS' ENTERED AT 09:09:21 ON 31 JAN 2008
L7 1016908 S L1 OR L2 OR L3 OR L4 OR L5 OR L6
L8 22764 S L1
L9 920942 S L2
L10 4146 S L3
L11 68175 S L4
L12 1003 S L5
L13 22725 S L6

FILE 'REGISTRY' ENTERED AT 09:10:08 ON 31 JAN 2008
E HYDROXYSUCCINIMIDE
E N-HYDROXYSUCCINIMIDE/CN
L14 1 S E3
E N-HYDROXYSULFOSUCCINIMIDE/CN
L15 1 S E3

FILE 'CAPLUS' ENTERED AT 09:10:58 ON 31 JAN 2008
L16 5280 S L14
L17 312 S L15
L18 5501 S L16 OR L17
L19 162 S L15 AND (PY<=2003)
L20 784186 S L7 AND (PY<=2003)
L21 18251 S L8 AND (PY<=2003)
L22 707903 S L9 AND (PY<=2003)
L23 3763 S L10 AND (PY<=2003)
L24 50287 S L11 AND (PY<=2003)

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L25         890 S L12 AND (PY<=2003)
L26       19656 S L13 AND (PY<=2003)
L27           0 S L19 AND L25
L28           8 S L19 AND L20

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                 E MALIC ACID/CN
L29           0 S E3/RACT

     FILE 'CAPLUS' ENTERED AT 09:19:17 ON 31 JAN 2008
L30        1540 S L1/RACT
L31       46553 S L2/RACT
L32         633 S L3/RACT
L33        4190 S L4/RACT
L34          42 S L5/RACT
L35         800 S L6/RACT
L36        4322 S L14/RACT
L37         184 S L15/RACT
L38       53062 S L30 OR L31 OR L32 OR L33 OR L34 OR L35
L39        4454 S L36 OR L37
L40       41864 S L38 AND (PY<=2003)
L41        3152 S L39 AND (PY<=2003)
L42          48 S L40 AND L41

     FILE 'CAPLUS' ENTERED AT 09:48:36 ON 31 JAN 2008
L43             STRUCTURE UPLOADED
                S L43

     FILE 'REGISTRY' ENTERED AT 09:49:10 ON 31 JAN 2008
L44           0 S L43

     FILE 'CAPLUS' ENTERED AT 09:49:10 ON 31 JAN 2008
L45           0 S L44

     FILE 'CAPLUS' ENTERED AT 11:02:13 ON 31 JAN 2008
                 E CROSSLINKING+ALL/CT
L46       72274 S CROSSLINKING AGENT
L47      595653 S SULFATE
L48        2066 S L46 AND L47
L49           8 S CHRONDROITIN SULFATE
                E CHONDROITIN SULFATE+ALL/CT
L50       13474 S (CHONDROITIN SULFATE OR "CHONDROITIN, HYDROGEN SULFATE")
L51         116 S L46 AND L50
L52           8 S L51 AND BIOMATERIAL

     FILE 'CAPLUS' ENTERED AT 11:24:22 ON 31 JAN 2008
L53         168 S L46 AND BIOMATERIAL
L54           2 S L53 AND CITRIC ACID
L55           1 S L53 AND POLYCARBOXYLIC ACID
L56           6 S L53 AND CARBOXYLIC ACID
L57         617 S L46 AND CITRIC ACID
L58          17 S L57 AND COLLAGEN
L59         733 S L46 AND POLYCARBOXYLIC ACID
L60           0 S L59 AND COLLAGEN
L61           4 S L59 AND GELATIN

=> log h
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                 ENTRY    SESSION
FULL ESTIMATED COST                             130.42     452.78
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STN Search - 10/517,692

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)       SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                  -24.00     -75.20

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 11:42:47 ON 31 JAN 2008

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PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 13:29:08 ON 31 JAN 2008
FILE 'CAPLUS' ENTERED AT 13:29:08 ON 31 JAN 2008
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COST IN U.S. DOLLARS                             SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                 130.42     452.78

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)       SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                  -24.00     -75.20

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     (FILE 'HOME' ENTERED AT 09:04:35 ON 31 JAN 2008)

     FILE 'REGISTRY' ENTERED AT 09:04:41 ON 31 JAN 2008
                E CITRIC ACID
                E CITRIC ACID/CN
                E MALIC ACID/CN
L1              1 S E3
                E CITRIC ACID/CN
L2          15758 S E 3
                E OXALACETIC ACID/CN
L3              1 S E3
                E CITRIC ACID/CN
L4              1 S E3
                E ACONITIC ACID/CN
L5              1 S E3
                E MALATE
L6           5352 S E3

     FILE 'CAPLUS' ENTERED AT 09:09:21 ON 31 JAN 2008
L7        1016908 S L1 OR L2 OR L3 OR L4 OR L5 OR L6
L8          22764 S L1
L9         920942 S L2
L10          4146 S L3
L11         68175 S L4
L12          1003 S L5
L13         22725 S L6
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STN Search - 10/517,692

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     FILE 'REGISTRY' ENTERED AT 09:10:08 ON 31 JAN 2008
                E HYDROXYSUCCINIMIDE
                E N-HYDROXYSUCCINIMIDE/CN
L14             1 S E3
                E N-HYDROXYSULFOSUCCINIMIDE/CN
L15             1 S E3

     FILE 'CAPLUS' ENTERED AT 09:10:58 ON 31 JAN 2008
L16          5280 S L14
L17           312 S L15
L18          5501 S L16 OR L17
L19           162 S L15 AND (PY<=2003)
L20        784186 S L7 AND (PY<=2003)
L21         18251 S L8 AND (PY<=2003)
L22        707903 S L9 AND (PY<=2003)
L23          3763 S L10 AND (PY<=2003)
L24         50287 S L11 AND (PY<=2003)
L25           890 S L12 AND (PY<=2003)
L26         19656 S L13 AND (PY<=2003)
L27             0 S L19 AND L25
L28             8 S L19 AND L20

     FILE 'REGISTRY' ENTERED AT 09:17:53 ON 31 JAN 2008
                E MALIC ACID/CN
L29             0 S E3/RACT

     FILE 'CAPLUS' ENTERED AT 09:19:17 ON 31 JAN 2008
L30          1540 S L1/RACT
L31         46553 S L2/RACT
L32           633 S L3/RACT
L33          4190 S L4/RACT
L34            42 S L5/RACT
L35           800 S L6/RACT
L36          4322 S L14/RACT
L37           184 S L15/RACT
L38         53062 S L30 OR L31 OR L32 OR L33 OR L34 OR L35
L39          4454 S L36 OR L37
L40         41864 S L38 AND (PY<=2003)
L41          3152 S L39 AND (PY<=2003)
L42            48 S L40 AND L41

     FILE 'CAPLUS' ENTERED AT 09:48:36 ON 31 JAN 2008
L43             STRUCTURE UPLOADED
                S L43

     FILE 'REGISTRY' ENTERED AT 09:49:10 ON 31 JAN 2008
L44             0 S L43

     FILE 'CAPLUS' ENTERED AT 09:49:10 ON 31 JAN 2008
L45             0 S L44

     FILE 'CAPLUS' ENTERED AT 11:02:13 ON 31 JAN 2008
                E CROSSLINKING+ALL/CT
L46          72274 S CROSSLINKING AGENT
L47         595653 S SULFATE
L48           2066 S L46 AND L47
L49              8 S CHRONDROITIN SULFATE
                E CHONDROITIN SULFATE+ALL/CT
L50          13474 S (CHONDROITIN SULFATE OR "CHONDROITIN, HYDROGEN SULFATE")
L51            116 S L46 AND L50
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L52           8 S L51 AND BIOMATERIAL

     FILE 'CAPLUS' ENTERED AT 11:24:22 ON 31 JAN 2008
L53         168 S L46 AND BIOMATERIAL
L54           2 S L53 AND CITRIC ACID
L55           1 S L53 AND POLYCARBOXYLIC ACID
L56           6 S L53 AND CARBOXYLIC ACID
L57         617 S L46 AND CITRIC ACID
L58          17 S L57 AND COLLAGEN
L59         733 S L46 AND POLYCARBOXYLIC ACID
L60           0 S L59 AND COLLAGEN
L61           4 S L59 AND GELATIN

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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   130.90     453.26

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                   -24.00     -75.20

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FILE COVERS 1907 - 31 Jan 2008  VOL 148 ISS 5
FILE LAST UPDATED: 30 Jan 2008  (20080130/ED)

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=> s l46 and polyacid
          1639 POLYACID
           988 POLYACIDS
          2317 POLYACID
                 (POLYACID OR POLYACIDS)
L62          81 L46 AND POLYACID

=> s l62 and (py<+2003)
      22927806 PY<+2003
L63          67 L62 AND (PY<+2003)

=> s l62 and (py<=2003)
      23975525 PY<=2003
L64          68 L62 AND (PY<=2003)
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=> s l64 and sulfate
        546575 SULFATE
         99691 SULFATES
        595653 SULFATE
                  (SULFATE OR SULFATES)
L65           2 L64 AND SULFATE

=> d ibib abs 1-2

L65  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2001:900492  CAPLUS
DOCUMENT NUMBER:          136:38944
TITLE:                    Chipping- and corrosion-resistant and sound-insulating
                          coating compositions containing coating components
                          recovered from coating booth water for automotive
                          bodies
INVENTOR(S):              Tanaka, Yoshito; Taniguchi, Hitoshi; Kurabayashi,
                          Osamu
PATENT ASSIGNEE(S):       Nippon Oil and Fats Basf Coating K. K., Japan; Fuji
                          Heavy Industries Ltd.
SOURCE:                   Jpn. Kokai Tokkyo Koho, 9 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     JP 2001342436         A     20011214    JP 2000-166399          20000602 <--
     JP 3910342            B2    20070425
PRIORITY APPLN. INFO.:                       JP 2000-166399          20000602
AB   The composition comprises (A) a thermoplastic resin, (B) a coating recovered
     from circulating water of coating booth, and (C) a water soluble resin.
     Thus, 28 parts Poly bd-R 45HT (butadiene rubber) was mixed with a
     polyester-based coating recycled from circulating water of coating booth
     6.9, adipic acid-1,4-butanediol-hexadecenylsuccinic anhydride-isophthalic
     acid-trimellitic anhydride-trimethylolpropane copolymer
     dimethylethanolamine salt 11.3, PW 380 (mineral oil-type plasticizing
     agent) 7.7, Hakuenka CCR (calcium carbonate) 36.8, Barite BA (barium
     sulfate) 11, Duranate TPA-B 80E (blocked isocyanate) 7 and butyl
     Cellosolve 2 parts, applied to a precoated steel plate and cured at
     140° for 30 min, showing good water, chipping and corrosion
     resistance and sound insulation.

L65  ANSWER 2 OF 2  CAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         1988:619521  CAPLUS
DOCUMENT NUMBER:          109:219521
TITLE:                    Photographic support material with antistatic
                          back-coating
INVENTOR(S):              Saeverin, Eckehard; Tyrakowski, Hans Udo
PATENT ASSIGNEE(S):       Schoeller, Felix, Jr., G.m.b.H. und Co. K.-G., Fed.
                          Rep. Ger.
SOURCE:                   Ger. Offen., 5 pp.
                          CODEN: GWXXBX
DOCUMENT TYPE:            Patent
LANGUAGE:                 German
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3700183	A1	19880714	DE 1987-3700183	19870106 <--
EP 274017	A2	19880713	EP 1987-116068	19871031 <--
EP 274017	A3	19900228		
EP 274017	B1	19920729		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 78938	T	19920815	AT 1987-116068	19871031 <--
ES 2033285	T3	19930316	ES 1987-116068	19871031 <--
JP 63173044	A	19880716	JP 1988-165	19880105 <--
US 5104779	A	19920414	US 1989-380212	19890714 <--

PRIORITY APPLN. INFO.:		
DE 1987-3700183	A	19870106
EP 1987-116068	A	19871031
US 1988-141925	B2	19880106

AB An antistatic photog. support showing low staining during transport through roller-transport development apparatus, a high abrasion resistance and stability in alkaline developer solns., good printability with com. printing inks, good writability, and good adhesive tape adhesion contains a backing layer from a composition containing: (1) a colloidal Al-modified silicic acid; (2) an alkali salt of an organic polyacid; (3) an aqueous dispersion of an alkyl acrylate copolymer having free carboxyl groups 1-10 mol% and free OH groups 0-20 mol%; and (4) a trifunctional aziridine as a crosslinking agent. The method of preparing the support comprises adding the components in a specific sequence and forming a layer on the backside of a support with the mixture Thus, a typical backlayer composition contained Ludox AM (colloidal Al-modified silicic acid), Bu acrylate-methacrylic acid-styrene copolymer, a trifunctional aziridine, and Na cellulose sulfate.

```
=> s l64 and biomaterial
         10076 BIOMATERIAL
         10856 BIOMATERIALS
         16264 BIOMATERIAL
                 (BIOMATERIAL OR BIOMATERIALS)
L66          0 L64 AND BIOMATERIAL

=> s l64 and gelatin
         72141 GELATIN
         30834 GELATINS
         83422 GELATIN
                 (GELATIN OR GELATINS)
L67          0 L64 AND GELATIN

=> log h
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                21.42     474.68

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)    SINCE FILE      TOTAL
                                                   ENTRY    SESSION
CA SUBSCRIBER PRICE                                -1.60     -76.80

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 13:33:40 ON 31 JAN 2008
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